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REVIEW

*A Liberal Arts Journal*

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# WASHINGTON COLLEGE REVIEW



WASHINGTON  
COLLEGE  
REVIEW

*A Liberal Arts Journal*

VOLUME V 1997  
CHESTERTOWN, MARYLAND

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Washington College  
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*The Washington College Review is a liberal arts journal that seeks to recognize the best of undergraduate student writing from all disciplines of the College and to publish work deserving of wider availability to readers in the college community and beyond. The Washington College Review is published annually by the Literary House Press of Washington College.*

## *Information for Contributors*

The *Washington College Review* accepts submissions from WC undergraduates of essays, fiction, and poetry. Submissions may deal with subject matter from any discipline taught at Washington College and in any of the foreign languages taught at Washington College. Manuscripts should not exceed twelve pages in length.

Interested students should contact one of the editors of volume VI for the application form to submit a manuscript: Jeanette E. Sherbondy, General Editor; Sarah Jarrell, Student Editor; Kathy Wagner, Creative Writing Editor; Ed Buscaglia, Social Science Editor; Donald McColl, Humanities Editor; or Kevin McKillop, Natural Science Editor. All manuscript submissions should include a cover letter and the completed form.

Manuscripts should be prepared according to the *Chicago Manual of Style* (14th edition, University of Chicago Press) or *A Manual for Writers of Term Papers, Theses, and Dissertations* (5th edition, University of Chicago Press) by Kate L. Turabian.

Manuscripts should be double-spaced. Notes should be numbered in sequence throughout the manuscript, then gathered together and typed at the end of the text and labeled End Notes. Works Cited or Sources Cited should be listed alphabetically after the End Notes.

Upon acceptance, authors will be asked for an electronic version of their manuscript.

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## FOREWORD

Since its founding in 1993, the *Washington College Review* has had as its goal the recognition and publication of the best of undergraduate student writing from all disciplines of the College. The selection process has never been an easy one, and this year was no exception.

Numerous articles were submitted for consideration, reflecting a broad spectrum of interests. The final selections, which appear in this year's edition, reflect that diversity. Included are articles about compassion in Mahayan Buddhism, the astronomical Ten Parsec Catalog, and the economic effects of acid rain, as well as numerous poems. The authors represent a variety of the majors that are offered at Washington College, ranging from economics, to French, to humanities, to international studies, and to English.

Speaking for myself and the other members of the editorial board, I want to thank the student authors for continuing the tradition of excellence that has been the hallmark of the *Journal*. I also want to express the gratitude of the board to those faculty who encouraged and advised students in their writing and research, in particular, Thomas Cousineau, Edgardo Buscaglia, George Shivers, Kevin Brien, Robert Day, Kathy Wagner, Geraldine Fisher, and Alice Baldwin. Finally, I would personally like to thank my fellow members on the editorial board for their dedication and hard work, and Meredith Davies Hadaway and Kristin Callahan for their assistance in the tasks of production.

Amzie D. Parcell, Editor



# THE TEN PARSEC<sup>1</sup> CATALOG: A TOOL FOR EXPLORING THE SOLAR NEIGHBORHOOD

BY TODD CHRISTOPHER BARTO

**A**re we alone in the universe? Extraterrestrials, UFOs, little green men: could they exist? With the recent discovery suggesting that microbial life might once have existed on Mars, more people believe that there could be life beyond Earth. The Search for Extraterrestrial Intelligence (SETI) program is dedicated to discovering the answer to this question. At the Space Telescope Science Institute, located on the Johns Hopkins University Campus in Baltimore, Maryland, the quest for intelligent life in the vast universe is pursued. The Hubble Space Telescope<sup>2</sup> provides a window to the cosmos and a chance to explore the solar neighborhood. From the information and data acquired from Hubble observations, astronomers have made many stunning discoveries that may soon answer the question that people have asked for generations. The Ten Parsec Catalog is a compilation of Hubble observational data from the nearby solar neighborhood. With the aid of the Hubble Space Telescope and the Ten Parsec Catalog, astronomers are searching the cosmos for signs of life.

How can we find another life-form out there? Where do we begin to look? The possibilities can be limited by looking at our own solar system, and specifically, the Earth. Life as we know it can only exist under certain conditions. Let us start by looking at our star, the Sun, to see what these conditions might be. Our Sun provides us with virtually every kind of energy upon which life depends. For this reason, it makes sense to search for stars that

are similar to our own energy source. The Sun is a star of a G2 class, a classification I shall explain in more detail later, with a surface temperature of approximately 6,000 degrees kelvin. The Earth orbits the Sun at a distance of one astronomical unit.<sup>3</sup> These conditions are essential to life on Earth, and they can aid in the search for other life-forms.

Life as we know it cannot exist without the presence of water. The Earth travels at an orbital radius of 150 million kilometers. At this distance from the Sun, whose size<sup>4</sup> and temperature play an important role, water is present on the Earth. The closest planet to the Sun, Mercury,<sup>5</sup> has temperatures so high that water would evaporate. Hence, we know that life cannot exist too close to a star due to the intense heat, which eliminates the possibility of the presence of water. Also, at very high temperatures molecules move at very high speeds. Mercury, for example, has temperatures so high that air molecules move fast enough to overcome the gravitational pull of the planet.<sup>6</sup> A planet this hot cannot hold air molecules around it to create an atmosphere. "The Earth's atmosphere is comprised of 78% nitrogen, 21% oxygen, and the remaining 1% is made up of water vapor, carbon dioxide, neon, and argon."<sup>7</sup> These elements provide us with the air that we breathe. At the very high temperatures that exist close to a star, a planet cannot have an atmosphere. Again, one can see that life cannot exist close to a star. Therefore, we search for a star similar to our Sun. The search could lead to the discovery of planets orbiting the star at approximately the same distance that the Earth is from the Sun. If a star similar to our Sun can be found, and it has a planet orbiting at approximately the same distance from which the Earth orbits our Sun, then it is possible that extra-terrestrial life can exist in that star system (see figure 1).

With these factors that determine where life can possibly exist, members of SETI search for Sun-like stars to find intelligent life.<sup>8</sup> One problem arises, however. On a clear night, away from city lights, one can see about three thousand stars with the naked eye. With telescopes, this number is increased dramatically.<sup>9</sup> The Research Consortium on Nearby Stars (RECONS) program

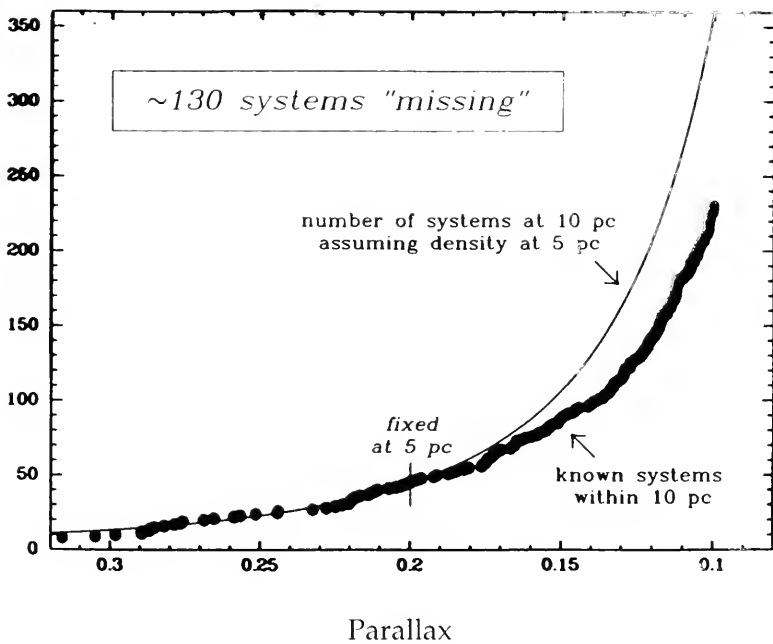


FIG. 1. SYSTEMS TO BE DISCOVERED WITHIN 10 PARSECS

has set out to alleviate this problem. Its goal is to characterize all of the stars within a ten parsec (abbreviated as "PC") radius of our star, the Sun. Therefore, we are searching for stars that lie within about 32.6 light years<sup>10</sup> away from us. Thus far, 319 stars have been located in 230 systems that lie within the given limit of ten parsecs. A number of the stars discovered are single stars, others are in pairs (binary systems), triple systems, quadruple systems, and so on. Figure 1 shows the number of systems that have been discovered, as well as an estimated margin for more discovery. The graph shows a plot of the cumulative number of stellar systems versus the parallax of each system. Parallax is a measure of the shift in position of a star, as seen from the Earth over a three-month interval. It is measured as an angle, in degrees, and is related inversely to the distance of the star from the Earth. "Each system is represented by a single dot to prevent overemphasizing multiple systems in the distance distribution."<sup>11</sup> For instance, the closest star, Alpha Centauri, has a parallax of  $1/4,800$  of a degree. Figure 1 shows that a large number of stellar objects have been discovered up to approximately five parsecs. Up to this point the stars are densely clustered. The average density of stars known within five parsecs is higher than the average density within ten parsecs. However, if we assume that stars are scattered out to ten parsecs with the same density in space as at five parsecs, the curve of best fit implies that we have yet to discover 130 more systems within ten parsecs. Imagine the positions of the players on a baseball field. There are nine players on the field. In the infield there are six players: the pitcher, catcher, first baseman, second baseman, shortstop, and third baseman. In the outfield there are only three players: the left fielder, center fielder, and right fielder. The density of players in the infield is much greater than that of the outfield. If the density of players were the same over the entire field, as we think it should be for the stars within ten parsecs, you would need several more players in the outfield. Thus, the RECONS team has more exploring of the solar neighborhood to do to discover "the complete lineup of players."<sup>12</sup>

Next we must learn about the absolute magnitude and spectral class of stars, which are very informative stellar properties, in order to gain more knowledge of what types of stars to inspect. The magnitude of a star is a measure of its brightness. Hipparchus, a famous astronomer in the second century B.C., classified stars in six classes of magnitude, with the brightest stars as first magnitude, decreasing in brightness up to the sixth magnitude. As astronomy has developed over the ages, more stars have been discovered, resulting in a modification and refining of Hipparchus's magnitude scale. The brightest stars now have magnitudes in the negative numbers, and dimmer stars stretch well past the sixth magnitude on the positive side. Sirius, one of the brightest stars in the night sky, has a magnitude of -1.47. The absolute magnitude of a star tells an observer how bright a star would appear to be if it were at a standard distance of ten parsecs. Sirius, pushed out to ten parsecs, would appear at magnitude +1.4; therefore, it has an absolute magnitude of +1.4.

When the spectrum of a star is taken, its light is split into different colors of light — the colors of the rainbow. With the spectra, one can determine a star's surface temperature, color, and information about its chemical makeup. This information is similar to that of a fingerprint of a star. Figure 2 shows the "Partial Spectra of an O-Type Star"<sup>13</sup> and the elements that are present in the star, as determined from its spectral analysis. From these spectral lines (the narrow white lines), astronomers can determine the temperature of the star. The hotter a star is, the more elements that are present in its spectra. Elements that appear in this example of an O-type star include hydrogen (H), helium (He), silicon (Si), oxygen (O), and mercury (Mg). Spectral classes are denoted by seven letters: from O for the hottest, B, A, F, G, K, to M for the coolest<sup>14</sup>. Each spectral class is divided into ten subdivisions as follows: B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, A0, A1, etc. The hotter stars of a particular subclass are of the zeroth type, with the cooler increasing in number up to subclass nine. Figure 3<sup>15</sup> shows a table of stellar spectra. The spectral classes can be determined from the spectra of a star. At extremely

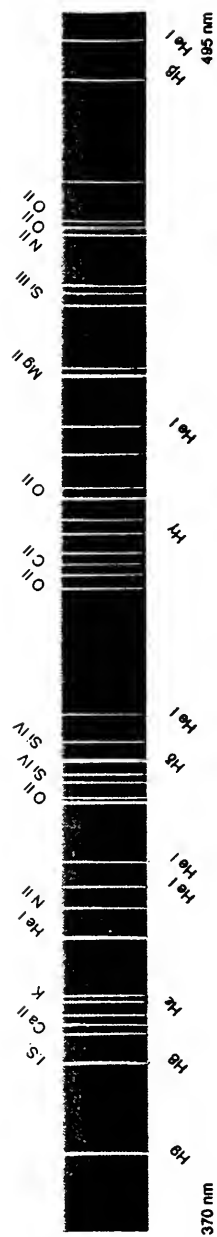


FIG. 2. PARTIAL SPECTRA OF AN O-TYPE STAR

high temperatures, typical of an O-Type star, the energetic collisions that occur among the atoms often knock electrons entirely free from the atom, thus producing ions with their own characteristic spectra. At low temperatures atoms may unite to form molecules such as titanium oxide (TiO), which is characteristic of M-type stars. Figure C contains the spectral classes of several well-known stars, along with the information gained from each spectrum and the surface temperature derived from that information. It shows that for each spectral class there are characteristic elements that exist within the star. Each star's spectra, with its distinctive elements, gives strong emission lines of those elements. These emission lines would appear as the narrow white lines, similar to those in figure 2. For example, in the B3 star hydrogen (H) and helium (He) emission lines are strongest, and in the F0 type star the hydrogen lines are weak for that particular temperature, but the calcium (Ca) lines are strong. The color of a star is related to its surface temperature (see figure 3).

Now that we know about the absolute magnitude and spectral class of stars, we can learn more about what types of stars we are searching the solar neighborhood for. The relationship between absolute magnitude and spectral class of stars gives very important information. Figure 4 shows a graph created by astronomers Ejner Hertzsprung and Henry Russell, called an H-R Diagram.<sup>16,17</sup> The plot of stars based on their absolute magnitude and spectral class shows that stars are grouped together unevenly. To further understand the diagram, let us observe the positions of some well-known stars. Our star, the Sun, is of the G2 type with an absolute magnitude of +5. It is labeled "A." Betelgeuse, part of the Orion constellation, is in the spectral class of M2 and has an absolute magnitude of -4. This star is in position "B." Based on what we know of spectral class, we know that Betelgeuse is a cool star. How, then, can Betelgeuse be so bright? This brightness implies that Betelgeuse and all other stars in the upper right-hand corner of the H-R Diagram are very large. They are called giants and supergiants, as labeled. Point "C" on the graph is the star Spica (spectral class B1, absolute magnitude -3).

Stellar Spectra

Class	Example	Spectra	Surface Temperatures
O5	—	Ionized helium, nitrogen, oxygen	50,000K
B3	Achernar	H, He strong	15,000K
A1	Sirius	H lines at max. Ca lines weak	11,000K
A3	Fomalhaut	H lines strong Ca lines stronger Metals weak	9000K
F0	Canopus	H lines weak Ca lines strong	7600K
F5	Procyon	Ca lines very strong Neutral metals	6600K
G0	Capella	Ca lines at max.	6000K
G2	Sun	Iron lines strong	
K2	Arcturus	H lines weak Molecular bands	5000K
M2	Betelgeuse	Neutral lines strong TiO molecules present	3500K

FIG. 3. STELLAR SPECTRA

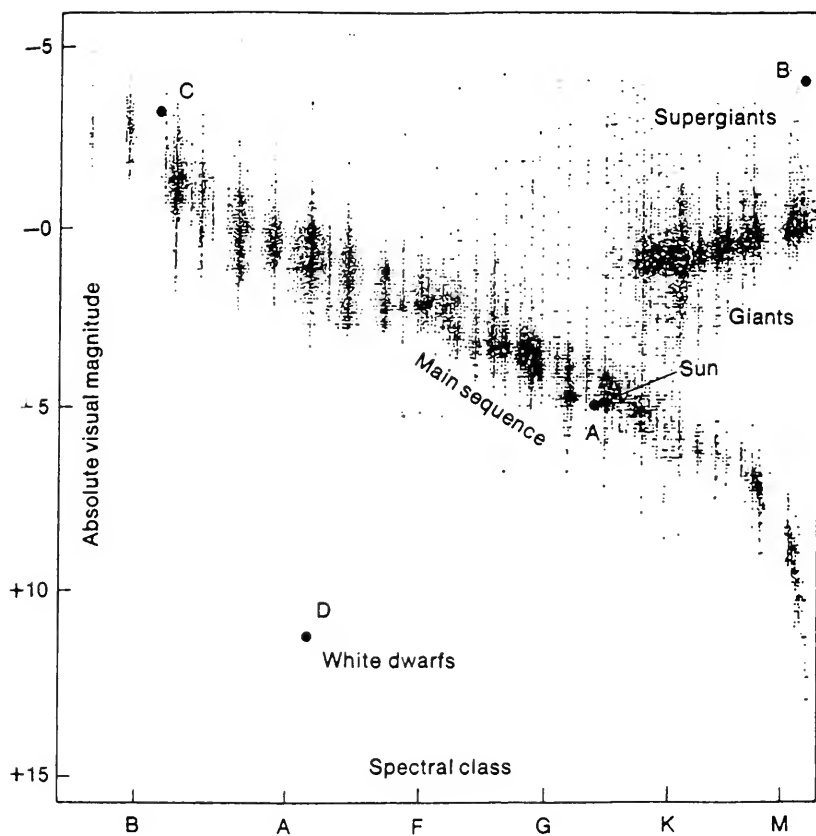


FIG. 4. HERTZSPRUNG-RUSSELL DIAGRAM

Stars that lie in the region through the middle of the diagram are called main-sequence stars. These stars have a relationship between temperature and luminosity that one would expect. Hotter stars are more luminous and cooler stars less so in this region. Stars located around point "D" are called white dwarfs. These types of stars are very hot but not very luminous, implying that they are small as well. If it were possible to remove the stars in the sky and group them together based on their brightness and color, one would create a similar chart of stars, grouping them similarly to a H-R Diagram. The human eye acts as a photometer, which measures how bright an object is, and a spectrometer, which determines what color it is. The H-R Diagram essentially accomplishes the same goal by grouping stars together in this same manner.

With the knowledge of what types of stars to look for, let us examine the significance of the Ten Parsec Catalog. As noted previously, RECONS has located 319 stars within the ten parsec limit. Figure 5 is a chart of stars within ten parsecs. This graph plots all 319 stars that have been found in the solar neighborhood. The total solar masses, plotted on the vertical axis, is a calculation of how many masses of our Sun<sup>18</sup> each class of stars totals. For example, the four A-class stars combine to make up about eight times the mass of our Sun. Each star is plotted in its respective spectral class, thus creating columns of each type of star. O and B spectral classes are not represented in the ten parsec limit, meaning there are not any stars of these classes within ten parsecs.

The Ten Parsec Catalog (TPC) is an astronomical reference. It contains one page for each known star, or system of stars, within ten parsecs. The main purpose of the TPC is to alleviate observational difficulties. Often, astronomers who are observing at a telescope need to have many different references on hand to find the information needed to locate a certain star. Sometimes the number of needed references runs as high as nine or ten. Time is of the essence when observing. The costs of using large, land-based telescopes and the availability of observing time is limited

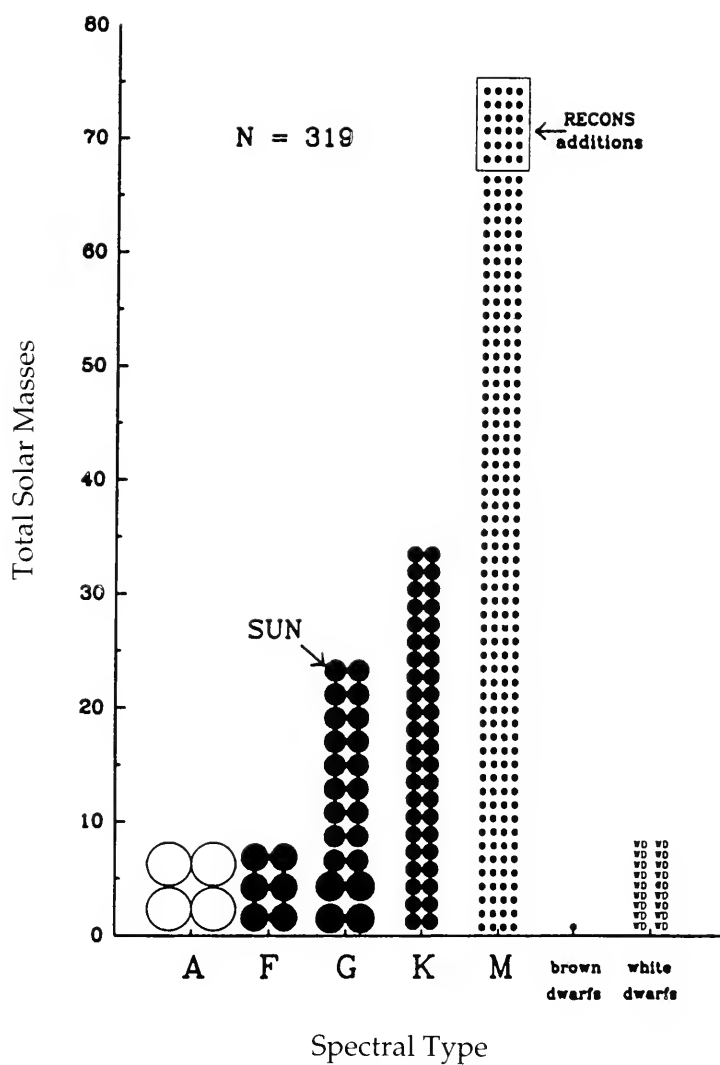


FIG. 5. STARS WITHIN TEN PARSECS

by the Earth's rotation. The TPC allows an observer to have only one reference which contains all of the information about every known star within ten parsecs. Furthermore, the SETI program can use this reference to aid in its observations of Sun-like stars in the solar neighborhood.

Let us look at the specifics of the TPC. The first example of a TPC entry is that for the star GL 1, shown in figure 6. This is an example of a single-star system. In the upper left-hand corner of the page, we see the name of the star in the bar. Under the barred area is a secondary name for the star "LHS 1." Across the top of the bar are six numbers, which are in groups of three digits. The first group of three is the star's right ascension, and the second set of three numbers is its declination. Right ascension and declination are for the sky what longitude and latitude are for the Earth. The right ascension is measured from east to west, similar to longitude. Declination is measured from the equator to north or south, similar to latitude. This information tells an observer the location of the star, thus telling him or her where to point the telescope. Directly below the right ascension and declination are the proper motion and parallax. Proper motion, denoted by  $m$ , is yet another way of locating a star. Proper motion is a measure of how fast a star is moving through space and in what direction. The first numerical information is the shift in position measured in arc-seconds. The second number following the "@" is a direction angle. One can find a star by using the following coordinate system and the proper motion:

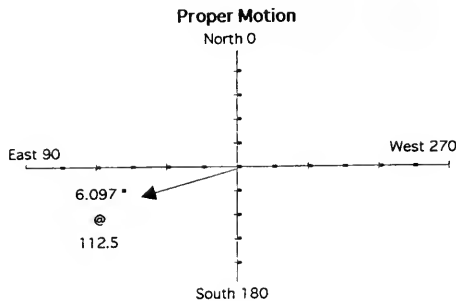


FIG. 6. COORDINATE SYSTEM FOR FINDING A STAR

GL 1	H 00 05 24.4	-37 21 26
------	--------------	-----------

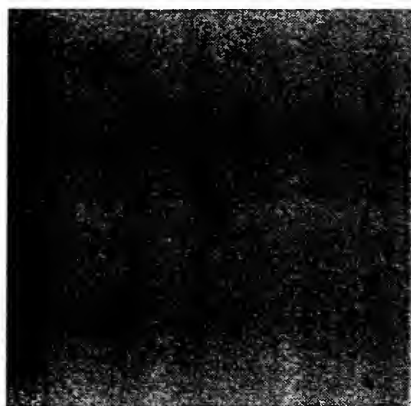
LHS 1

1 component

N

$\mu = 6.097'' \odot 112.5^\circ$

$\pi_{\text{LHG}} = 0.2194 \pm 0.0093$



E

V	8.55 L
R	7.56 L
I	8.42 L
J	5.25 L
H	4.74 L
K	4.52 L
$M_v$	10.26
$M_c$	6.25
ST	M3.0 V*

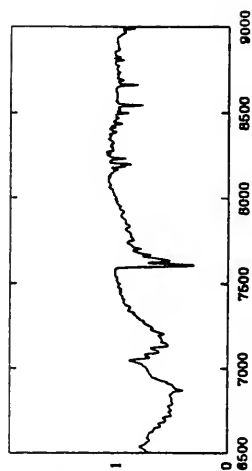


FIG. 7. EXAMPLE OF A TPC ENTRY FOR STAR GL1

The parallax, which was discussed previously, is located beneath the proper motion.

The second example from the TPC is that of GL 244 AB (see figure 8). The "AB" indicates that this is a binary system. The number of components in each system is located under the LHS number. In this example it reads "2 components." Below the number of components is a viewfinder chart for the star. This information shows what the star looks like through the eyepiece of a telescope and how crowded the field of view is. In this example the finder chart reads "Sirius." The lack of a viewfinder chart implies to an astronomer that this is a very bright star, too bright, in fact, to aim a high-quality optical telescope towards. A radio telescope<sup>19</sup> or an optical telescope of lesser magnification would be better for observing this star. The epoch shows the date at which the photo-plate for the finder chart was taken. Epochs are generally taken every fifty years. Adjacent to the finder chart is the photometry of the star, or stars. Photometry measures the brightness of a star in a certain wavelength region, often called the "bandpass" of the particular filter used to measure the amount of light passing through it. The V, R, and I magnitudes are measured at optical wavelengths. V is centered around 0.54 microns (or 5,400 angstroms). R is centered near 0.67 microns, and I near 0.78 microns. J, H, and K magnitudes are measured at infrared wavelengths and have bandpasses around 1.2, 1.6, and 2.2 microns, respectively.

In this example, the photometry is evident in the finder chart. The V magnitude of the primary star A is -1.45, indicating that it is an extremely bright star. Remember that the lower the number, the brighter the star. (There are no finders given for stars with V magnitudes brighter than 2.0 because they would make the whole finder chart black.) The secondary star in this binary system is a fainter star with a magnitude of  $V = +8.44$ , but it is not shown because it is lost in the glare of the primary. The letters that follow the data in each column of photometry designate the reference from which the information came. Beneath the photometry is the absolute magnitude, denoted by  $M_V$  and  $M_K$ .



which was discussed previously. The spectral class information is given under the absolute magnitude. Earlier we discussed the meaning of the spectral class, but not in full detail. We already know that the first letter determines the spectral class, and the following number gives the subclass. There are six more denominations of spectral class that follow the subclass, however. These final symbols are as follows:

- Ia Most luminous supergiants
- Ib Less luminous supergiants
- II Bright giants
- III Normal giants
- IV Subgiants
- V Main-sequence stars

A “\*” tells the observer that the star is a recent RECONS addition<sup>20</sup>. Finally, the spectra of the star or stars lie beneath the absolute magnitudes. As stated previously, the spectra provide what is comparable to a fingerprint of a star. This is a different way of expressing the spectra of a star. Each star has a distinct spectrum. The standard spectrum for a red, Sun-like star requires an absolute V-magnitude ( $M_v$ ) smaller than 8.0. If the star, or system of stars, is not a part of our standard system, then the type of star is given where the spectra would be found. In this example, neither star is a type of star that we are looking for. The primary star is an A Dwarf and the secondary star is a White Dwarf. Thus, by having this information written on the catalog page, astronomers know that these are not Sun-like stars.

Though the Ten Parsec Catalog is not yet ready for publication, the astronomical community is eagerly awaiting its arrival. It will be a great tool for observers of our neighborhood of the cosmos. The Search For Extraterrestrial Intelligence can be aided enormously by the TPC. We know what types of stars to look for, based on the examination of our solar system and our own planet, and we know where to locate these stars from the RECONS research and exploration. The question of whether we are

alone in the universe is a frequently pondered one. Astronomers have searched the cosmos for decades in the hope that an answer can be found. There are many factors that determine if life can exist, let alone a life-form that is capable of interstellar communication. Scientific advances such as the Ten Parsec Catalog will make exploring nearby stars a much easier task, which astronomers hope will lead to amazing discoveries and answers.

## END NOTES

<sup>1</sup> One parsec is approximately 3.26 light years.

<sup>2</sup> The Hubble Space Telescope is a 2.4 m, f/24 Ritchey-Cretien telescope capable of performing observations in the visible, near-ultraviolet, and near-infrared (1,150 Å to 1 mm). Launch Date: 1990-04-25 (STScI Web Page).

<sup>3</sup> One astronomical unit (approximately 150 million kilometers) is the average distance between the Earth and the Sun.

<sup>4</sup> The Sun has a diameter of approximately 1,390,000 kilometers, and a mass of  $1.991 \times 10^{33}$  grams. This is nearly 110 times bigger than the Earth and 300,000 times more massive.

<sup>5</sup> Mercury orbits the Sun at 0.387 astronomical units.

<sup>6</sup> Escape velocity for Mercury is 4.3 kilometers per second.

<sup>7</sup> Dixon 110

<sup>8</sup> Intelligent life implies life-forms that are advanced and have the technology to communicate through galactic space. There would be no possibility of locating a race of beings that cannot communicate over the cosmos in some fashion.

<sup>9</sup> The increase in magnification from a pair of binoculars enlarges the pupil by about 30 times, enabling a stargazer to see tens of thousands of stars. With a medium-size telescope with a light collecting mirror 30 centimeters in diameter, one can see hundreds of thousands of stars.

<sup>10</sup> A light year is the distance that light will travel in one year.

<sup>11</sup> Dr. Todd Henry of the Space Telescope Science Institute, email to author, 23 January 1997.

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<sup>12</sup> Dr. Todd Henry of the Space Telescope Science Institute, email to author, 14 April 1997.

<sup>13</sup> Vogt 37.

<sup>14</sup> A simple mnemonic device for the spectral classes was created. With one word per spectral class letter it reads, "Oh Be A Fine Girl/(Guy), Kiss Me."

<sup>15</sup> Dixon 326.

<sup>16</sup> The H-R Diagram was created in the early twentieth century. Approximately 6,700 stars are plotted on this graph.

<sup>17</sup> Dixon 327.

<sup>18</sup> One solar mass equals  $\sim 1.989 \times 10^{33}$  grams.

<sup>19</sup> A radio telescope has a large parabolic reflector that collects the radio energy from one region of the sky and concentrates that energy at a focal point. Electronic equipment amplifies and records the energy.

<sup>20</sup> Dr. Todd Henry at the Space Telescope Science Institute collected data in Chile during the summer of 1996. This data revealed the newest stars located within ten parsecs. They are labeled RECONS additions.

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# OPEN = SESAME

BY RAYMOND CUMMINGS

*"If my soul has a shape, then it is an ellipse."*  
— Pavement, "Blue Hawaiian"

When you're speaking Castillian, you're  
lispering right through me to  
the coven on the second floor;

syringed {eyes} tinged cochineal, caved-in glowing  
luminescent and cold  
like November

nights won't fit snug without  
long, woolen

sleeves and whiskey on my breath,  
eyelids heavy  
before you're ready

to choke down sleep or a bright, scattered  
wash of stars.

# THE GOD OF LOVE

BY BRANDON HOPKINS

## I

*"My single constancy is love of life!"*

In a letter dated 22 April 1914, D.H. Lawrence wrote, "But primarily I am a passionately religious man, and my novels must be written from the depth of my religious experience."<sup>1</sup> Throughout his body of work, he attempts to change his reader's outlook on Christianity and seeks a more life-affirming form of worship. In his two-part tale, *The Man Who Died*, Lawrence remodels the character of Christ to illustrate the importance of his "single constancy" by giving us a portrait of what he calls "The Risen Lord," one who abandons the mission of being the God of Love in order to experience "the actual vital touch."

The Protestantism with which Lawrence grew up, as George Panichas points out, was certainly a great influence on his thinking — indeed, his early church years inspired the deep Bible readings that are evident in all of his work.<sup>2</sup> For Lawrence the "religious faculty," which he regards as man's highest faculty, signifies an "inward worship of the creative life mystery." Panichas tells us:

Religious experience and meaning for Lawrence were as vital as the flow and movement of life itself. For him religion and life were interdependent facets of the search for the creative and spontaneous fullness of being in the universal sense of the word. To achieve

this he had to break free of any religious life-experience that was regimented by legalistic and moralistic religious tradition.<sup>3</sup>

Lawrence's problem with organized religion was "that the Christian Church had given too much stress to the Christ of the *via dolorosa*, to the memory of the wounds and death, of the everlasting 'crosses and nails and all that stuff'" and very little attention is given to the "creative life mystery" and the "animate life of man."<sup>4</sup> In his opinion, the message of Christianity sermonized in churches is life-negating because it concentrates on the Crucifixion, rather than the Resurrection. He points out that "after Easter, till November and All Saints, and till Annunciation the year belongs to the Risen Lord: that is, all the full-flowering spring, all summer, and the autumn of wheat and fruit, all belong to Christ Risen."<sup>5</sup> It is the rebirth of Christ that he sees as the essential lesson of Christianity, "the transfiguration not out of flesh but into flesh."<sup>6</sup> In portraying a Christ he can live with, "[Lawrence] believed it was necessary to redefine, to de-mythologize, and then to remythologize Christ's place in life..."<sup>7</sup>

Furthermore, as Graham Hough argues in his article, "Lawrence's Quarrel with Christianity," Lawrence finds the concept of Christian universal love problematic. "For Christianity as Lawrence always sees it is the attempt to live from the love-motive alone — to make love, *caritas*, pure altruism the only motive in life: 'The essence of Christianity is the love of mankind.'"<sup>8</sup> In demanding each individual to be a source of universal love, Christianity falsifies the natural relation between men, which is carnal. The result is "a love which is cut off from the natural carnal roots of love, and continues to exist simply as a function of the will. It is sterile in itself and life exhausting to whoever exercises it." Moreover, "it becomes inevitably a kind of spiritual bullying, and must inevitably be rejected by anyone who wishes to preserve his individual being."<sup>9</sup> Freud was thinking something similar at around the same time as Lawrence when he wrote:

The commandment, 'Love thy neighbour as thyself,' is the strongest defense against human aggressiveness and an excellent example of the unpsychological proceedings of the cultural super-ego. The commandment is impossible to fulfil; such an enormous inflation of love can only lower its value, not get rid of the difficulty. Civilization pays no attention to all this; it merely admonishes us that the harder it is to obey the precept the more meritorious it is to do so.<sup>10</sup>

Lawrence, as well, saw that universalizing love dilutes it, and he believed that despite its effectiveness in the past "the love-mode is exhausted. Christianity is kept going by a barren force of will, it has no longer any connection with the deep sources of life...."<sup>11</sup> It is this "barren force of will" which Lawrence's Christ refers to as the "compulsion" of the messianic mission he has abandoned. His abandonment of his mission includes an inherent denial of Christian *caritas* — Lawrence's Christ sets out to experience the life of the flesh. Lawrence inverts the Christian ethos, as Hough notes:

Spiritual love and sensual love are, after all, both forms of love: and the Christian depreciation of sexuality is an accident rather than the essence of its doctrine... For Christianity, the life of the flesh receives its sanction and purpose from a life of the spirit which is eternal and transcendent. For Lawrence the life of the spirit has its justification in enriching and glorifying the life of the flesh of which it is in any case an epiphenomenon.<sup>12</sup>

## II

Part One of *The Man Who Died* was titled "The Escaped Cock" when Lawrence first wrote it in Italy in April of 1927. Originally

it stood on its own: a story about the resurrection of Christ into the life of flesh and the denial of his former life and death. Lawrence's Christ figure — who is never directly referred to as "Christ" — is allegorically connected to the gamecock, whose "Body, soul and spirit were tied down by that string." The cock, bound to a post by the peasant who owns it, longs to be free. Bursting with life and virility, it has freedom but to "[crow] defiance to the cock-crows that showered up out of limbo, in the dawn."<sup>13</sup> Christ, too, is bound at the beginning of the tale: "Only his hands were loose."<sup>14</sup> He removes the bandages that cover him and, driven by "a wave of strength that came from revulsion," moves aside the rock that blocks the entrance of the sepulcher. Leaving the "cell of rock" he realizes that his emergence means a "full awakening."<sup>15</sup> "At the same time, at the same hour before dawn, on the same morning" the cock snaps the string that binds him and escapes over the wall of the peasant's yard.<sup>16</sup>

Passing the wall of the olive orchard, "wondering why he should be travelling, yet driven by a dim, deep nausea of disillusion," Christ is "roused by the shrill wild crowing of a cock just near him, a sound which made him shiver as if electricity had touched him."<sup>17</sup> The connection between the two of them is made even stronger — Christ is electrified by the virility and energy of the escaped cock.

The peasant tries to catch the bird, calling to Christ to capture it. When he looks upon the face of the man who died, he is transfixed. The face of Christ startles the peasant; the description of it is harrowing: "The dead-white face, so still, with the black beard growing on it as if in death; and those wide-open black sobre eyes, that had died! and those washed scars on the waxy forehead."<sup>18</sup> Throughout the first half of Part One, Lawrence attempts to give us a ghostly, corpse-like picture of Christ. Slowly, he recovers from death, as his wounds begin to heal.

The bird is caught and once more tied up. Christ returns with the peasant to the clay cottage and receives food and drink. The peasant and his wife agree to hide Christ from the authorities.

Watching the cock tethered in the yard pounce with sexual frenzy on a hen, Christ envisions the birds as

one wave-tip of life overlapping for a minute another, in the tide of the swaying ocean of life. And the destiny of life seemed more fierce and compulsive to him even than the destiny of death. The doom of death was a shadow compared to the raging destiny of life.<sup>19</sup>

This realization clearly connects with Lawrence's belief "that overcoming the 'fear of death' is not enough, that 'the fear of life' must also be conquered [...]." <sup>20</sup> Christ has dealt with death, he still feels the pain of it, but it is the "destiny of life" with which he must now contend.

Living in the cottage, Christ is once more immersed in the world of men. He looks upon the peasants "with compassion," but considers them "dirty and stupid" and lacking the energy of the gamecock. He realizes that he is "the man who had died" while the peasant is "the man who had not died, and who never could die, save to return to earth."<sup>21</sup> Christ's recognition of this spurns him to regard his former mission of love as futile. He says to himself:

Why, then, should [this peasant] be lifted up? Clods of earth are turned over for refreshment, they are not lifted up. Let the earth remain earthy, and hold its own against the sky. I was wrong to seek to life it up. I was wrong to try to interfere. The ploughshare of devastation will be set in the soil of Judæa, and the life of this peasant will be overturned like the sods in the field. No man can save the earth from tillage. It is tillage, not salvation....<sup>22</sup>

The natural order of the world, as presented here, comprises life and death. Once again Lawrence shows the primacy of the life of flesh and the life of the spirit as the epiphenomenon thereof: "Let

the Earth remain earthy..." The relation of earth and sky mentioned here is the seed of Part Two of *The Man Who Died*.

Christ's declaration that "salvation" is futile echoes what Lawrence writes near the end of *St. Mawr*:

And every civilization, when it loses its inward vision and its cleaner energy, falls into a new sort of sordidness, more vast and more stupendous than the old savage sort. An Augean stable of metallic filth.

And all the time, man has to rouse himself afresh, to cleanse the new accumulations of refuse. To win from the crude wild nature the victory and the power to make another start, and to cleanse behind him the century-deep deposits of layer upon layer of refuse: even the tin cans.<sup>23</sup>

This is the world as Lawrence sees it: Man's struggle against ever-rising refuse where the living must accept the power of creation "that destroys as it goes, but remains sweet" and where "[the] dead will have to bury their dead."<sup>24</sup> In this world, man digs himself out of his own ancient sordidness only to be buried again, and all the while the "destiny of life" ravages men, just as the power of nature in *St. Mawr* overruns the English woman's ranch. It is of this world that Lawrence's Christ asks (for now he is a part of it), "From what, and to what, could this infinite whirl be saved?"<sup>25</sup> Christ's question undermines the spiritual import of salvation by once again valuing the life of the flesh, as sorrowful and difficult as it is, above the life of the "eternal and transcendent" spirit.

When he meets with Madeleine, she falls at his feet to kiss them, but he tells her that she may not touch him for he is "not yet healed and in touch with men."<sup>26</sup> His words are a reminder of the *Noli me tangere* in the Bible. In *St. Mawr*, Lou gives an interpretation of these words:

I do so understand why Jesus said: *Noli me tangere* .  
 Touch me not, I am not yet ascended unto the Father.  
 Everything had hurt him so much, wearied him so  
 beyond endurance, he felt he could not bear one little  
 human touch on his body.<sup>27</sup>

But here the sense is somewhat different. It is more literal. He is still aching with death, and he is not yet ready to endure contact. It is important to note that he does not fully heal in Part One of the tale, though he is certainly set upon the road of discovery of the "vital touch."

Christ tells Madeleine that his life as the Messiah is over. He says, "The teacher and the saviour are dead in me; now I can go about my business, into my own single life." His triumph, he tells her, is that he is not dead. "But my mission is over, and my teaching is finished, and death has saved me from my own salvation."<sup>28</sup> Once more, Lawrence is turning a Christian word upon itself: Christ is saved from being saved. Again, he is discounting the question of salvation by making it appear futile: "Yet I would embrace multitudes, I who have never truly embraced even one."<sup>29</sup> Of course, the idea here is that *caritas* was false, for carnal love is the "true embrace." And how can a man love humanity when he had not experienced the "vital touch" of carnal love. Elsewhere, Lawrence expresses this same idea: "To be able to live at all, mankind must be loved more tolerantly and more contemptuously than Jesus loved it, loved for all that, more truly, since it is loved for itself, for what it is, not what it ought to be, free and limitless."<sup>30</sup> It was this illusion, he continues, this overwhelming demand, that gave Judas reason to betray him.

He has denied his mission, but he does say that it was nothing. He compares his "excessive salvation" and excess of giving to the lovers of Madeleine's past, and how she took excessively from them. Excess in living, he tells her, leads only to another death.<sup>31</sup> Excess disrupts the "natural balance." When Madeleine does not completely understand, "A revulsion from

all the life he had known came over him again, the great nausea of disillusion, and the spear-thrust through his bowels."<sup>32</sup> He borrows money from her and returns to the peasant's cottage.

It is with the peasant's wife that Lawrence's Christ understands carnal desire for the first time.

The day was hot, and as she crouched to serve him, he saw her breasts sway from her humble body, under her smock. He knew she wished he would desire her, and she was youngish, and not unpleasant. And he, who had never known a woman, would have desired her if he could. But he could not want her, though he felt gently towards her soft, crouching, humble body.<sup>33</sup>

The language here is sensuous. He looks at her breasts and her "humble body," understanding that he can have her if he wants, and he is attracted to her physically, but "He turned away from it without hesitation."<sup>34</sup> He cannot "mingle with her consciousness"; she is too obsessed with money and too willing to take without return. He looks upon his own virginity as its own sort of greed, "the greedy life of the body."<sup>35</sup> "Now he knew that he had risen for the woman, or women, who knew the greater life of the body, not greedy to give, not greedy to take, and with whom he could mingle his body." He sees no urgency to "mingle his body," for having died he knows he has time to wait.

Shortly after this scene, Christ repeats, this time to the peasant, that he cannot be touched, but he adds: "I am not yet risen to the Father."<sup>36</sup> When he meets Madeleine a second time, he repeats the latter again and again: "I am not yet ascended to the Father," "I must go to my Father!" and "But now I must ascend to my Father." "[The] reader will remember that in Lawrence's mythology the Father was also the Flesh."<sup>37</sup> This we gather from Christ's words to the gamecock: "Surely thou art risen to the Father, among birds." In this way, Lawrence connects the sexual image of the gamecock to Christ's new life of the flesh. Once he

has left Madeleine, his mother, and Joan, and all the others of his former life behind, he is free of constraints, his life is once again his to live alone. He is free of "compulsions":

I tried to compel them to live, so they compelled me to die. It is always so, with compulsion. the recoil kills the advance. Now is my time to be alone.<sup>38</sup>

He is finally completely beyond the messianic mission. He has eradicated compulsions from his life. At last, he rids himself of the last vestige of his Christian life, St. John's "Word":

The Word is but a midge that bites at evening. Man is tormented with words like midges, and they follow him right into the tomb. But beyond the tomb he cannot go. Now I have passed the place where words can bite no more and the air is clear, and there is nothing to say, and I am alone within my own skin, which is the walls of all my domain.<sup>39</sup>

Words are the instruments of compulsion, and having no compulsion he has no need for them, having died and returned he is beyond their reach. Their peskiness will never reach him again. He is nothing more and nothing less than human, he extends no further than the flesh of which he is composed, and words are unable to scale the walls of his "domain." The result of all this is that "he healed of his wounds, and enjoyed his immortality of being alive without fret." He left his "striving self" in the tomb, thus ridding himself of ambition and defeating his fear of death. Now that he has defeated his fear of life, and he is "purely alone," he has attained "one sort of immortality."<sup>40</sup>

Upon this attainment of fleshy immortality — a life without cares — Jesus sets out into the world of men. Lawrence believed:

The soul is not to pile up defenses round herself. She is not to withdraw and seek her heavens inwardly, in mystical ecstasies. She is not to cry to some God beyond, for salvation. She is to go down to the open road, as the road opens, into the unknown, keeping company with those whose soul draws them near to her, accomplishing nothing save the journey, and the works incident to the journey, in the long life-travel into the unknown, the soul in her subtle sympathies accomplishing herself by the way.<sup>41</sup>

It is this very sentiment that Lawrence's Jesus himself feels. He will "ascend to the Father" by taking to the open road and wandering "among men." (It should be noted, also, that the reference to "works" in this passage may have been intended to bring to mind the dispute among Catholics and Protestants as to the importance of works in the soul's salvation.) That Jesus takes the peasant's gamecock with him is no surprise. Both the cock and Jesus are hot with life, and Jesus wonders if he will find a woman who can lure him.<sup>42</sup> When he meets two of his followers along the way, he praises not the Christ he was, but rather the "life and virtue" of the bird; thus, in effect, the man he has become. He reveals himself to them as the one they thought was their Messiah, then gives them the slip. Thereafter he goes to an inn, where he tells a man that if his bird defeats the other, the man may keep him, if not, then he may eat him. The cock wins and Jesus leaves him behind, saying: "Thou at least hast found thy kingdom, and the females to thy body. Thy aloneness can take on spendour, polished by the lure of thy hens."<sup>43</sup> Having left the bird, he is truly alone. He seeks his own kingdom and his own female companions.

Jesus stands on the brink of the world of man. Now he asks himself, "From what, and to what, could this infinite whirl be

saved?"<sup>44</sup> He is nauseated by the "strange entanglement of passions and circumstance and compulsion everywhere" and "the dread insomnia of compulsion." He sees that the fear of death drives men mad, and that if he stays anywhere too long, men compel and bully him.

It was the mania of cities and societies and hosts, to lay a compulsion upon a man, upon all men. For men and women alike were mad with the egoistic fear of their own nothingness. [...] And the old nausea came back on him. For there was no contact without a subtle attempt to inflict compulsion. And already he had been compelled even into death. The nausea of the old wound broke out afresh, and he looked again on the world with repulsion, dreading its mean contacts.<sup>45</sup>

Lawrence leaves his Jesus without any sign of finding what he seeks. No one in the world of men is able to live without compulsions, or without inflicting them. Lawrence's hatred for the superficiality, the bullying, the egoism of society are transferred to his character. But so is his hope of eventually finding "the actual vital touch."

### III

Part Two of *The Man Who Died*, written in 1928 in Gsteig-bei-Gstaad, Switzerland, seems at first a different story entirely. The reason for this is that Lawrence departs from the tenets and mythos of Christianity, wandering into pure fancy. The Christ character from Part One looks different in a new setting: he has wandered far from Jerusalem, up the Mediterranean coast to Lebanon. "At this point Lawrence is seeking to show how the incipient power of discovery, depicted in the first part of the story, can be transformed into a more animate and vital fulfillment which can come only through direct contact with another

human being."<sup>46</sup> From the moment the second part of Lawrence's tale begins, our eyes are directed "south and west, towards Egypt,"<sup>47</sup> the mythical home of Isis and Osiris.

All the criticism on *The Man Who Died*, good and bad, is myopic in that it fails to examine Lawrence's manipulation of the Osiris-Isis myth, which he more than likely borrowed from Sir James George Frazer's *Golden Bough*.<sup>48</sup> His use of Osiris and Isis is as important as his revision of the Christian mythos; indeed, to the second part of the story, and to Lawrence's philosophy as a whole, it is more important.

Frazer tells the story of the myth of Osiris<sup>49</sup>: Osiris was the offspring of the earth-god Seb and the sky-goddess Nut, the wife of Ra. When Ra found out that Nut had been unfaithful, he set a curse on her so that she could not be delivered of her children on any day of the year. Another lover of the sky-goddess, whose name was Thoth, played draughts with the moon, winning seventy seconds of a day until he had amassed five whole days of time, which he then added to the Egyptian year (making it 365, instead of 360 days). The five new days were not affected by the curse of Ra, since they were not technically in the year, and Osiris was born on the first. "At his nativity a voice rang out proclaiming that the Lord of All had come into the world." At the temple of Thebes it was announced that the "great king" was born. The siblings of Osiris included Horus, Set, Isis, and Nephthys. "Afterwards Set married his sister Nephthys, and Osiris married his sister Isis."<sup>50</sup>

Reigning as king on earth, Osiris reclaimed the Egyptians from savagery, gave the laws, and taught them to worship the gods. Before his time the Egyptians had been cannibals. But Isis, the sister and wife of Osiris, discovered wheat and barley growing wild, and Osiris introduced the cultivation of these grains amongst his people, who forthwith abandoned cannibalism and took kindly to a corn diet. [...] Eager to communicate these beneficent discoveries to all mankind, he com-

mitted the whole government of Egypt to his wife Isis, and travelled over the world, diffusing the blessings of civilisation and agriculture wherever he went. [...] [On] account of the benefits he had conferred on mankind he was unanimously hailed and worshipped as a deity.<sup>51</sup>

Later, when Osiris was twenty-eight, his brother Set and seventy-two others conspired against him. They tricked him into lying in a coffer then "slammed the lid down on him, nailed it fast, soldered it with molten lead, and flung the coffer into the Nile." Isis, upon hearing of what had happened, cut away a lock of her hair, dressed in mourning clothes, and began searching for the body of Osiris. Along the way, she gave birth to her son, Horus. Meanwhile, the body had floated all the way to Syria. When the coffer containing him landed on the coast of Byblus, an *erica*-tree sprang up and enclosed the coffer in its trunk. The king of the country had the tree cut down, not knowing Osiris was in it, and made it into a pillar of his house. Isis heard of her husband's whereabouts and went to Byblus to release him. In the likeness of a swallow, she hovered by the pillar:

Then the goddess revealed herself and begged for the pillar of the roof, and they gave it her, and she cut the coffer out of it, and fell upon it and embraced it and lamented so loud that the younger of the king's children died of fright on the spot. [...] And Isis put the coffer in a boat and took the eldest of the king's children with her and sailed away. As soon as they were alone, she opened the chest, and laying her face on the face of her brother she kissed him and wept.<sup>52</sup>

Isis returned to Egypt with the coffer, but she left it unattended while going to visit her son Horus. Set, recognizing the body, "rent it into fourteen pieces, and scattered them abroad." Isis, then, went searching once more. Eventually she found all the

pieces of Osiris's body. "However, the genital member of Osiris had been eaten by the fishes, so Isis made an image of it instead, and the image is used by the Egyptians at their festivals to this day." Finally, Isis and her sister, Nephthys, sat down beside the corpse of Osiris and lamented so that Ra sent down Anubis, "who, with the aid of Isis and Nephthys, of Thoth and Horus, pieced together the broken body of the murdered god, swathed it in linen bandages, and observed all the other rites which the Egyptians were wont to perform over the bodies of the departed." Thus, Osiris was the first mummy and "every dead Egyptian was identified with Osiris and bore his name."

Then Isis fanned the cold clay with her wings: Osiris revived, and thenceforth reigned as king over the dead in the other world. There he bore the titles of Lord of the Underworld, Lord of Eternity, Ruler of the Dead... In the resurrection of Osiris the Egyptians saw the pledge of a life everlasting beyond the grave.<sup>53</sup>

Thus, Frazer concludes his telling of the myth, referring to Osiris as the "dead and risen Lord."<sup>54</sup>

The obvious similarities between Christ and Osiris are interesting, but it is the differences that are essential to note. Most importantly, Osiris was the son of an Earth god and a Sky goddess. Most pagan religions tend to have earth gods, or gods which represent aspects of nature, while the development of Judaism and other monotheistic religions meant the rise of the all-powerful Sky god. In Lawrence's mythology, Osiris (who Jesus embodies, thus becoming a compromise between paganism and christianity) is in between Sky and Earth, but living an earthly existence.

When Lawrence's Jesus arrives in Lebanon, he finds the flower-like Temple of Isis and its attendant priestess. The Isis worshipped in the temple is not the "Mother of Horus," but "Isis Bereaved, Isis in Search."<sup>55</sup> She searches for Osiris, to "gather him together and fold her arms round the re-assembled body till

it became warm again, and roused to life, and could embrace her, and fecundate her womb." She is "Isis of the subtle lotus, the womb which waits submerged in bud, waits for the touch of that other inward sun that streams its rays from the loins of the male Osiris." The priestess herself, for all her similarities to the goddess she worships, is a manifestation of Isis in Search. She has "known" Cæsar and Anthony, but she waits for the "man re-born," to whom she can truly give herself.

It is interesting to note that while this priestess knew Cæsar, so did the goddess Isis, as Frazer notes:

In that welter of religions which accompanied the decline of national life in antiquity her worship was one of the most popular at Rome and throughout the empire. Some of the Roman emperors themselves were openly addicted to it.<sup>56</sup>

Also, Lawrence stresses the fact that the Isis of the temple is not the Mother of Horus: "Certainly in art the figure of Isis suckling Horus is so like that of the Madonna and child that it has sometimes received the adoration of ignorant Christians."<sup>57</sup> Lawrence clearly draws us away from the accidental similarity between Mary and Isis by distinguishing the Isis worshipped in his tale as the Isis in Search. (This distinction is important to remember when Lawrence mentions Jesus looking at the Dog Star, Sirius, at the end of the story.)

Lawrence obviously attempts to limit our interpretations of Isis in *The Man Who Died*. He simplifies her to some extent (in the same way he did elements of the Christian mythos in Part One), so that she is still "the creatress of the fresh verdure of vegetation which covers the earth"<sup>58</sup> and a goddess of fertility, but he concentrates on that fertility as it manifests itself in the human context of carnal love. The priestess, being representative of the goddess, receives these attributes as well. Her temple is "like a pale flower on the coast" and it reminds us of her own flower-like

quality. She is an Isis in Search who waits, having waited for seven years, since she was twenty, for her "dead and risen Lord" — that is, Lawrence's Jesus. They are "the man who had died, and the woman of the pure search."<sup>59</sup>

Jesus approaches the temple, after both he and the priestess witness the sexual frenzy of a slave boy and girl. He asks for shelter, and Isis lets him stay in a small cave near the temple. When she goes to look at him in the morning, after her servant tells her that Jesus is a malefactor, she feels "as if the tip of a fine flame of living had touched her."<sup>60</sup> She allows him to continue sleeping there, and when she returns to the temple, she finds that "even in her ministrations, she was disturbed." Jesus feels it too: "The flame of this tender girl!" He wonders whether he should stay or go, and he asks himself:

Dare I come into touch? For this is further than death.  
I have dared to let them lay hands on me and put me  
to death. But dare I come into this tender touch of life?  
Oh, this is harder — <sup>61</sup>

Tenderness seems to him "more terrible and lovely" than the death he died. He fears the discovery of the "vital touch."

Finally, the two meet in the temple, where the myth is consummated. Jesus says that the "greatest of gods" is the one who has granted him the vision of "destinies of splendour" — he now sees a "greater power" in life.<sup>62</sup> The statue of Isis in the temple is like a "great woman presence urging" as the priestess makes herself "completely penetrable." "Ah! how terrible to fail her, or to trespass on her!" he says to himself.<sup>63</sup>

Isis asks if he is Osiris; "if you will," he responds.<sup>64</sup> Isis begins to anoint his wounds, and we are reminded of the original Osiris myth, when Isis gathers the pieces of her brother-husband and breathes life back into his dead body. Jesus once again denies his former life:

I asked them all to serve me with the corpse of their love. And in the end I offered them only the corpse of my love. This is my body — take and eat — my corpse — <sup>65</sup>

This reference to the "bread of life" echoes another from the first part of the tale when he says of the money Madeleine gave him, "It buys bread, and bread brings life." The bread no longer exists as a symbol of the transubstantiated Christ, but is taken literally as a life-giver: food that gives energy for the Life of the Flesh. Now Christ is transformed into the god of fertility, Osiris, he who discovered agriculture and who "produced the corn from himself: he gave his own body to feed the people: he died that they might live."<sup>66</sup> Unlike the Osiris of the myth, whose genital member was lost, Jesus becomes more like the statue of Osiris that Egyptians used to place between the legs of mummies as a symbol of virility beyond death. He is like one of the effigies of Osiris that women carried out into the cornfields, making it perform obscene movements as though it were fecundating the harvest. He is purely phallic, and he makes the priestess "big with Osiris."<sup>67</sup>

In *St. Mawr*, one of his short novels, Lawrence expresses his disgust with modernity through the character of Lou Witt: "Our whole eunuch civilization, nasty-minded as eunuchs are, with their kind of sneaking, sterilizing cruelty."<sup>68</sup> In the novel, he shows how a lack of "natural balance" created by the modern age of machine-driven civilization destroys the flow of human contact and leads "to the loss of deep and self-responsible consciousness in man."<sup>69</sup> What is lacking is a sort of life energy and a creative life-force (even, as suggested above, lack of virility), that which has been superseded by "excessive mental reliance on the externals of the modern machine-civilization"<sup>70</sup> and social superficiality, just as St. Mawr, the stallion symbolizing potency and the pagan god Pan, is superannuated by automobiles and locomotives. "'But our civilization, with its humble fear and funk and repression and bullying,' he writes, 'has almost destroyed

the natural flow of common sympathy between men and men, and men and women, and it is this that I want to restore into life.”<sup>71</sup>

Lawrence deplores Christian depreciation of sexuality by giving his character genitals. He is not the God of Love, but the god of carnal love. Furthermore, Lawrence’s Jesus forsakes this corpse of love, *caritas*. “There dawned on him the reality of the soft warm love which is in touch, and which is full of delight.”<sup>72</sup> It is beyond his prayer, and he cries out, asking, “Father! why did you hide this from me?”<sup>73</sup> And he realizes: “I shall be a man. It doesn’t need understanding. It needs newness. She brings me newness—.”<sup>74</sup>

The sensual experience is regenerative, though “he wondered if it were another sort of death: but full of magnificence.”<sup>75</sup> Finally, he feels “the blaze of his manhood” and cries, in mockery of the words of the biblical Christ, “I am risen!” Other references are made to the Bible: he says “On this rock I built my life” reminding us of Peter, but meaning the “deep-folded, penetrable rock of the living woman!” And, “my mansion is in the intricate warm rose, my joy is this blossom!”<sup>76</sup>

His wounds become suns of atonement. The atonement is “the being in touch.” Isis in Search is, at last, “filled with the risen Osiris!”<sup>77</sup> When he looks out at the sky, he sees it as a “great rose of Space” that is opening up to him. On the horizon, the Dog Star, Sirius is on the rise.

For in the early days of Egyptian history, some three or four thousand years before the beginning of our era, the splendid star of Sirius, the brightest of all the fixed stars, appeared at dawn in the east just before sunrise about the time of the summer solstice, when the Nile begins to rise. The Egyptians called it Sothis, and regarded it as the star of Isis, just as the Babylonians deemed the planet Venus the star of Astarte. To both peoples apparently the brilliant luminary in the morning sky seemed the goddess of life and love come to

mourn her departed lover or spouse and to wake him from the dead. Hence the rising of Sirius marked the beginning of the sacred Egyptian year, and was regularly celebrated by a festival which did not shift with the shifting of the official year.<sup>78</sup>

The presence of the star in Lawrence's tale is a marker of the beginning of the season of fertility. All is "at one" in "the being in touch."<sup>79</sup>

At the end of the tale, Jesus must leave his lover behind to avoid getting caught by the authorities. "They shall not profane the touch in me." He tells her not to worry for he will be back "sure as Spring."<sup>80</sup> He steals the boat belonging to the authorities, after chasing away the slave boy whom he had seen rape a girl, and shoves off to sea:

I have sowed the seed of my life and my resurrection,  
and put my touch forever upon the choice woman of  
this day, and I carry her perfume in my flesh like  
essence of roses. She is dear to me in the middle of my  
being. But the gold and flowing serpent is coiling up  
again, to sleep at the root of my tree.<sup>81</sup>

The tree is an interesting ambiguity. It reminds us of Christ's tree, the rood, and also the tree in which Osiris was encased. His seed is sown, and now it is time to wait again until the next season of fertility, but he carries with him the sensual memory of Isis. The serpent coils to rest again.

#### IV

One of Lawrence's main interests in *The Man Who Died* is to convert the Sky god of Christian *caritas* into a sort of earth god of carnal love. He does so by writing the story as a tale. "The principle causality in tale is psychological and morally expres-

sionist, or poetic..."<sup>82</sup> The psychology and philosophy of the story are more important than the story itself. Indeed, Parts One and Two are held together by a continuation of theme, not by setting or action; even the character seems to have changed noticeably in the second part. Lawrence is even willing to drop some of his most striking symbols from the story, as Widmer points out:

The literal gamecock slips out of the story in the middle, his symbolic functions transferred to the hero just as the other creature's in Lawrence's bestiary (the fox in *The Fox*, the stallion in *St. Mawr*) drop out of their fictions. The symbolic object has no independent existence, no sacramental significance in and of itself.<sup>83</sup>

Whether one considers Lawrence's technique to be sloppy, as Widmer does, or not, it must be admitted that he succeeds in so far as he "charms or lulls [the reader] into dropping objections; that is, persuades him to suspend disbelief"<sup>84</sup> at least as long as one is reading the story. We may even contend that Lawrence's prose does sometimes get too repetitive, sometimes to the point of tedium (again Widmer provides a good example: "Waking from the tomb, he feels 'numb' and 'cold' and 'full of hurt'; and 'full of hurt' and 'numb' and 'cold' and 'full of hurt.'"<sup>85</sup>), but he is repetitive for a purpose. Lawrence wants to create a mysterious-sounding language, one almost cryptic in its poetic (when at its best) use of repetition. The vagueness of the language itself implies something greater than what is said. (One may speculate as to whether Lawrence was influenced by the Metaphysical poets, who had become popular in his time due to T.S. Eliot's interest in them.) Lawrence's imitation of scripture mixed with his own sermonizing creates a style very similar to the writings of the mystics. His formulaic phrases like "the being in touch" and "the greater day of the human consciousness," among the many others, are like the phrases that Plotinus, Ruysbroeck, Boehme, or St. Augustine use over and over again. The mystical

passion of Plotinus is similar to Lawrence:

Then he speaks of "the veritable love, the sharp desire" which possessed him, appealing to the experience of those fellow mystics who have "caught fire, and found splendour there." These, he says, have "felt burning within themselves the flame of love for what there is to know — the passion of the lover resting on the bosom of his love."<sup>86</sup>

Even the words he uses seem to be taken from them. Furthermore, it can easily be said of Lawrence that like a mystic he has "an overwhelming consciousness of God and of [his] own soul: a consciousness which absorbs or eclipses all other centres of interest."<sup>87</sup> Lawrence is by no means a mystic — that is not the implication here — in fact, his lack of complete absorption in a one-on-one relation to a personal God separates him from them, but he does appear to have attempted to imitate their language and their rapture to call our attention to a magical quality, a religious luster, that he wants his work to have.

Like the author's own search for religious clarity, *The Man Who Died* has its successes and failures; and it has received, like its author, both condemnation and praise. *The Man Who Died* is not the keystone of Lawrence's work, but it can be an important key to understanding his larger works. It contains in a nutshell many of the ideas that Lawrence worked out at greater length in *The Plumed Serpent*, *The Rainbow*, *Women in Love*, *Aaron's Rod*, and *Lady Chatterley's Lover*. Most importantly, it is Lawrence's most concise criticism of Christianity cast in the light of his own life-affirming philosophy.

#### END NOTES

<sup>1</sup> Panichas, 16.

<sup>2</sup> Ibid. 17.

<sup>3</sup> Ibid.

- <sup>4</sup> Ibid., 125.
- <sup>5</sup> Ibid., 134.
- <sup>6</sup> Ibid., 128.
- <sup>7</sup> Ibid., 125-26.
- <sup>8</sup> Hough, 102.
- <sup>9</sup> Ibid., 103.
- <sup>10</sup> Freud, 109.
- <sup>11</sup> Hough, 102.
- <sup>12</sup> Ibid., 111.
- <sup>13</sup> Lawrence, 164.
- <sup>14</sup> Ibid., 165.
- <sup>15</sup> Ibid., 166.
- <sup>16</sup> Ibid., 164-65.
- <sup>17</sup> Ibid., 167.
- <sup>18</sup> Ibid.
- <sup>19</sup> Ibid., 172.
- <sup>20</sup> Panichas, 127.
- <sup>21</sup> Lawrence, 173.
- <sup>22</sup> Ibid., 172.
- <sup>23</sup> Ibid., 153-54.
- <sup>24</sup> Panichas, 27.
- <sup>25</sup> Lawrence, 183.
- <sup>26</sup> Ibid., 173.
- <sup>27</sup> Ibid., 117.
- <sup>28</sup> Ibid., 174.
- <sup>29</sup> Ibid.
- <sup>30</sup> Hough, 104.
- <sup>31</sup> Lawrence, 175.
- <sup>32</sup> Ibid., 176.
- <sup>33</sup> Ibid., 177.
- <sup>34</sup> Ibid.
- <sup>35</sup> Ibid., 178.
- <sup>36</sup> Ibid.
- <sup>37</sup> Hough, 108.
- <sup>38</sup> Lawrence, 179-80.
- <sup>39</sup> Ibid., 180.

- 40 Ibid.
- 41 Panichas, 19-20.
- 42 Lawrence, 182.
- 43 Ibid., 183.
- 44 Ibid.
- 45 Ibid.
- 46 Panichas, 131.
- 47 Lawrence, 185.
- 48 Widmer, 202. (Widmer notes *The Golden Bough* as a source, but does not examine its use in *The Man Who Died*.)
- 49 Frazer, Chapter XXXVIII, 420-27.
- 50 Ibid., 421.
- 51 Ibid., 421-22.
- 52 Ibid., 423.
- 53 Ibid., 426-27.
- 54 Ibid., 427.
- 55 Lawrence, 188.
- 56 Frazer, 444-45.
- 57 Ibid., 445.
- 58 Ibid., 444.
- 59 Lawrence, 197.
- 60 Ibid., 193.
- 61 Ibid., 196.
- 62 Ibid., 202.
- 63 Ibid., 203.
- 64 Ibid.
- 65 Lawrence, 204-5.
- 66 Frazer, 437.
- 67 Lawrence, 209.
- 68 Ibid., 90.
- 69 Panichas, 21.
- 70 Ibid.
- 71 Ibid., 18.
- 72 Lawrence, 205.
- 73 Ibid., 207.
- 74 Ibid., 206.

- 75 Ibid.
- 76 Ibid., 207.
- 77 Ibid., 208.
- 78 Frazer, 429-30.
- 79 Lawrence, 208.
- 80 Ibid., 210.
- 81 Ibid., 211.
- 82 Gardner, 73.
- 83 Widmer, 202.
- 84 Gardner, 24.
- 85 Widmer, 202.
- 86 Underhill, 11.
- 87 Ibid., 9

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# THE EFFECT OF THE AESTHETICS OF NEW WAVE FRENCH CINEMA ON THE FEMALE DIRECTORS WHO FOLLOWED THE MOVEMENT

BY ROBYN J. MITCHELL

*The "New Wave" is neither a movement, nor a school, nor a group, it's a quantity, it's a collective name invented by the press for a group of fifty new names which appeared suddenly in two years [...] this mass of films only had in common their refusal (concerning filmmaking methods) [...].<sup>1</sup>*

François Truffaut did not believe in the "New Wave," and neither, perhaps, did any of the directors of the 1960s, but it is still possible to link together most of the films of that time because of their unique and similar characteristics. The filmmakers strove to attain a common goal: self-expression. The "New Wave" is a name given to a group of filmmakers, but those directors also produced a body of films which can be considered a "movement" because of their effect on the films that followed them and can therefore be analyzed together.

French New Wave filmmakers came into prominence at the end of the 1950s, the exact date varies according to the source, but is usually said to be 1958 or 1959. French society was fragile, not only because of the beginning of the Fifth Republic and the governmental changes it brought, but also because of the Algerian war for independence from France. The French were open to new forms of entertainment and distraction which would allow them to forget about the political problems erupting around them. Television was introduced to the French near the end of the 1950s<sup>2</sup> so, for the first time, film directors had a rival. News and

entertainment programs were televised in homes across the country; families were less inclined to go out to the cinema when they could stay at home and watch television in complete comfort. The directors, therefore, had to create original films to gain the attention of potential audiences. It became common for directors to include shocking content, like the gratuitous displays of sexuality in Roger Vadim's *Les Liaisons dangereuses* (1960). However, shocking their audiences was not enough for the directors. They also wanted to develop a new style of cinematography different from any the French had ever seen before. They adopted cinematographic techniques from various earlier directors, American and French, and developed their own as well. The films of the New Wave became very distinct in style and content.

The New Wave was not well-received initially. The French government censored Vadim's *Les Liaisons dangereuses* for its sexually explicit content and for Annette Stroyberg's nudity.<sup>3</sup> The government also censored Jean-Luc Godard's *Le Petit soldat* (1960) because of its political statement regarding the war in Algeria.<sup>4</sup> Fortunately for the directors, but unfortunately for the government, the censorship made these films, and all the films of the New Wave, more popular. The government, therefore, had an important role in the establishment of the movement.

New Wave directors tried to make their films different from those of other time periods, both in cinematography and by combining genres and themes. For example, Godard made his first film, *A bout de souffle* (1960), by "ignoring the established conventions of narrative, which even such personal filmmakers as [Ingmar] Bergman and [Federico] Fellini more or less observed [...]. *A bout de souffle* was at one and the same time a Gangster story and an essay about Gangster films."<sup>5</sup> Godard combined the gangster genre and a statement about gangster films in a new way, without a narrative form.

The New Wave was not, however, all about box-office success. The movement brought to cinema a technique called *la*

*camera-stylo*, or the *camera-pen*. This term compares filmic creation to writing, generalizing the way any artist expresses his thoughts.<sup>6</sup> Monaco adds that through this comparison, films become more personal.<sup>7</sup> Astruc elaborates:

The cinema is beginning to become simply a mode of expression, like all the other arts before it [...] it is becoming more and more of a language. A language, that is to say, a form in which and by which an artist can express his thoughts, as abstract as they may be, or translate his obsessions exactly as he could today in an essay or a novel. That is why I call this new age that of the camera-pen. This image has a very precise meaning. It means that the cinema fights more and more over this visual tyranny, of image for image, of the immediate anecdote, of the concept, to become a way to write as flexibly and subtly as that of written language.<sup>8</sup>

Astruc observes that directors during the New Wave did not make the films as much for public entertainment as to write their thoughts on the screen for the public to understand. Cinema became an art form instead of a way to make money. Unlike the film industry of today, New Wave filmmakers did not try to make films that would become "blockbusters." They wanted to express themselves, but more as authors than as visual artists. Monaco believes that "the movement of film aesthetics toward personal art and away from collectively produced genres reached a climax in the middle fifties,"<sup>9</sup> just before the New Wave movement began. The term *camera-pen* was adopted by many other directors to describe the "personal art" of the New Wave.

Though the New Wave movement was dominated by men, working among these male directors was Agnès Varda, the most famous female filmmaker from the 1950s and 1960s, a contemporary of Roger Vadim, Jean-Luc Godard, François Truffaut, Claude

Chabrol, and Eric Rohmer. Before Varda began her career and gained respect as a filmmaker, female directors were basically nonexistent. She started her own revolution, encouraging other female directors to follow her lead. The success of female directors since can be traced back to Varda's success during the New Wave. The following exploration of how the New Wave affected female film directors, particularly Agnès Varda and Marguerite Duras, will also determine if they used the same cinematographic techniques as their male equivalents.

Prior to the New Wave, films were more simple in their composition and cinematography, using the standard techniques like smooth transitions from scene to scene with the fade in or fade out. When the New Wave appeared, this simplicity disappeared because the directors began experimenting: "A century before, [filmmakers] were writers. Fascinated by American cinema, filled with wonder by the magic cave of Henri Langlois, they used cinema to create novels, philosophy, poetry. And they began to film in the first person."<sup>10</sup> Point of view changed to first person in films because of the development of new cameras. Technology advanced, as always, and the cameras became lighter and easier to carry.<sup>11</sup> Therefore, hand-held cameras became an integral part of the New Wave. The scenes seemed more elementary, but more real, because, for the first time, the viewer sees the film through the eyes of a character. For example, in Roger Vadim's *Les Liaisons dangereuses* (1959), the viewer often sees Cécile through the eyes of Valmont, especially through the many close-up shots of her body.

The new hand-held cameras resulted in unsteady shots that became characteristic of New Wave films. These shots disappeared in the early 1970s with the introduction of the "Steadicam."<sup>12</sup> The hand-held cameras of the 1950s and 1960s were lighter and cheaper,<sup>13</sup> decreasing the budgets of the films. Godard, for example, made *Numéro 2* in 1975 using the same budget as his first in 1960.<sup>14</sup> Because of the low budgets, it became common for directors to pay for their films themselves.<sup>15</sup>

The directors of the New Wave created unique cinematography, bringing to their art several techniques borrowed from their predecessors. François Remasse mentions "the notion of *mise en scène* that they took from Hitchcock, and the notion of *auteur* that they owe to [Jean] Renoir."<sup>16</sup> The former technique, adopted from Hitchcock, relies on the relationship between the placement of objects in the scene and the dialogue between the characters within it. Hitchcock made films in which "the dialogue says one thing, the *mise en scène* another,"<sup>17</sup> like *Strangers on a Train* (1951) in which the scenery of the fair contradicts the serious conversation between characters.

The latter technique, that of Jean Renoir, became typical of the films of the New Wave. Instead of dividing the responsibilities in the creation of a film, Renoir believed that there should be one *auteur* who writes dialogue, who creates the scenery, etc.,<sup>18</sup> Hitchcock and Renoir were each revolutionary, but New Wave directors changed almost everything in the cinematography, their films becoming more art than entertainment.

The cinematographic techniques in New Wave film established a sense of realism. The dialogue was more natural and also somewhat improvised.<sup>19</sup> The directors wanted to make films that were more realistic, but which still allowed for self-expression. The films of the New Wave were successful in both of these areas. Godard's film *A bout de souffle* was not only successful in France, but also in the United States under the title *Breathless*.

Because of its success as well as its unique style, *A bout de souffle* was believed by many to be the first film of the New Wave:

The revolution of *A bout de souffle* is that of an adieu to Bogart and all he represents, that is to say an adieu to cinematographic fiction as it was presented during some sixty years, to a fiction perfectly distributed in multiple genres and resting on a space of convention between the public and the filmmaker, cinema in general, that wanted the illusion of a story and of

continuous time. It is that adieu that abruptly put an end to *A bout de souffle* with its fractures, its deliberate jumps that open onto a new world, which would be that of the 1960s.<sup>20</sup>

These changes in the cinema of the 1950s and 1960s caused a veritable revolution led by Godard and Truffaut. Truffaut's first film, *Les 400 coups* (1959), won the Prize for Best Mise en Scène at the Cannes Film Festival that year.<sup>21</sup> After his success, Truffaut adapted David Goodis's novel, *Tirez sur le pianiste* (1960). This film increased the number of cinematographic techniques that directors could use because it was "an exercise of technical virtuosity, where Truffaut does a practical test of all the gamut of methods of cinematographic narration (flashback, divided screen, ellipses, multiple exposure...)." <sup>22</sup> Truffaut, and his friend Godard, were the fathers of the New Wave. The other directors of the movement followed their lead and used many of the characteristic techniques of the New Wave.

Besides the specific techniques of the New Wave, directors would try anything to make their films different. It was also common for a film that tried any new cinematographic techniques to be characterized as New Wave. Godard used "jump-cuts" in *A bout de souffle* in the middles of scenes several times, but later abandoned the device. Other directors integrated the jump-cut into other montage techniques.<sup>23</sup> During the New Wave, the same cinematography was never used twice, because each director tried new techniques for each film.

The career of Agnès Varda began before those of Truffaut and Godard. She made her first film, *La Pointe courte*, in 1954.<sup>24</sup> But before becoming a filmmaker, she was the official photographer of the TNP.<sup>25</sup> Unlike Truffaut and Godard, who had been film critics before becoming directors,<sup>26</sup> Varda was a visual artist. Because of her training and success in photography, the transition to film was not difficult for her. Many of her films thus resembled photographs.

*Jane B. par Agnès V.* (1988) was filmed near the end of Varda's career, but the visual aspect of her filmmaking is more evident here than in the rest of her films. The first and last image of the film is "a part of Titian's painting *La Vénus d'Urbino* or *Vénus au petit chien* (the tiled floor at the bottom of the painting)." <sup>27</sup> Between these two images, Varda paints the portrait of Jane Birkin:

This freedom of pictorial nature is also concerned with the style of the relationship between these two sequences. Agnès Varda proceeds constantly not only by free association of ideas and images. A pictorial practice makes a reference here: that of the series in which the paintings — Agnès Varda visualizes Picasso — represent their model in the different characters, costumes, and scenery. <sup>28</sup>

Her films become paintings and, because of her photography background, in turn become photographs.

Her films were characteristic of the New Wave, but they were also feminist in content. Varda therefore contributed to the wave of feminist expression that began during her career. <sup>29</sup> In *Cléo de 5 à 7* (1962) she reversed "the classic relationship between [the woman] and others." <sup>30</sup> The other directors of the New Wave, especially Roger Vadim, used women as unintelligent sexual objects. Brigitte Bardot, for example, became famous not for her acting or intelligence, but for her sexuality. New Wave directors used women only for the visual image that they brought to the screen. Varda included women as objects in her films, <sup>31</sup> but her women had minds as well. In *Cléo de 5 à 7*, the "female object [...]" renounced the typical female finery to be able to engage in dialogue herself (notably with the soldier) instead of waiting to be chosen. <sup>32</sup> Cléo is not the same object as the women in films of Vadim or of Godard because of her decision to go against social mores.

Varda contributed to the New Wave, but she did not necessarily follow the movement. She was an "isolated pioneer of the cinema of the *auteur* at the heart of the 1950s, marginally of the 'New Wave'."<sup>33</sup> She made many films during the New Wave movement, but only *Cléo* was commercially successful. The cinematography of *Cléo* was unique in that it took place in real time. Varda used the news reports from the actual day she was filming<sup>34</sup> to create the reality of time. She also filmed in chronological order so that the film followed the physical and psychological progression of the main character. *Cléo de 5 à 7* thus added new dimensions to the realism of the New Wave.

Despite the consistency with the New Wave movement, Varda also displayed a desire uncharacteristic of other directors: she wanted to use a large budget to make a film. *Cléo de 5 à 7* was not the original film she wanted to create in 1960. When she approached her producer, Georges de Beauregard, with her plans for *La Mélangite*, he declined because it was going to be too expensive. Instead, he gave her the freedom to create a film with a smaller budget, 50 million francs (roughly 10 million dollars). She made *Cléo de 5 à 7* instead, including the prologue from *La Mélangite*.<sup>35</sup> Her desire to make an expensive film was contrary to the austerity of directors like Truffaut and Godard who worked on slim budgets. They achieved economy by producing their own films, eliminating such roles as decorator, sound engineer, and make-up artist<sup>36</sup> in order to cut the budget.

Varda was known for making primarily documentaries. *Sans toit ni loi* (1985) was the first fiction film she had made in ten years.<sup>37</sup> Most of the other directors of the New Wave avoided documentary films. Godard began with fiction films, but eventually abandoned it for essay.<sup>38</sup> Other directors adapted novels, including some by Marguerite Duras.<sup>39</sup>

Marguerite Duras had been a successful author for about thirty years.<sup>40</sup> before making her first film, *La Musica* (1966). Many of her novels had been filmed by other directors. She decided they had done enough damage to her writing and that if

her novels were to be properly adapted into films, she would have to do it herself.<sup>41</sup>

Her career was a gradual transition into film from writing. In 1959, she collaborated with Alain Resnais to adapt her novel *Hiroshima, mon amour* into film. Just after, she collaborated with Gérard Jarlot in writing *Une aussi longue absence*, filmed by Henri Colpi.<sup>42</sup> Therefore, Duras began her film career during the New Wave.

Duras' filmmaking was literary, just as Varda's was photographic. Duras made films which were novels, not because they were based on novels, but because of her manner of filmmaking. There exists a fine line between her novels and her films:

Through an imperceptible and continuous shift, she went from words on a page to images on a screen. The word 'writing' almost ceased being a metaphor. The text remains, but spoken and no longer written, made fragile by its passage to the human voice, it tends to abolish itself as much as creates itself without leaving any traces.<sup>43</sup>

Like the directors of the New Wave who expressed themselves on the screen, Duras did the same, by creating novels as films.

From 1966 to 1971, Duras continued with her writing while she made films. But in 1971, after writing *L'Amant*, she abandoned literature for a career exclusively in film.<sup>44</sup> In 1975, she made her most famous film, *India Song*, which contained many original cinematographic techniques.

Varda and Duras remain today the two most prominent female filmmakers in France. There are, of course, other female directors who may have been or may not have been influenced by the New Wave. However, since Duras and Varda are the most famous, they show that the influence of the New Wave had an effect on their success. They adopted characteristics from the New Wave directors, though the New Wave was not their exclusive influence. Both directors show the importance of the movement in the evolution of cinema. It is difficult not to be

influenced by the New Wave because of all the new techniques and developments it brought to bear on the world of cinema. It was definitely one of the most important cinematographic movements, and its undeniable influence on the female directors in France effectively proves this.

END NOTES

<sup>1</sup> François Truffaut quoted in Jean-Michel Frodon, *L'Âge moderne du cinéma français: De la Nouvelle Vague à nos jours* (France: Flammarion, 1995), 21, my translation.

<sup>2</sup> Jean-Luc Douin, *La Nouvelle Vague 25 ans après* (Paris: Les Editions du Cerf, 1983), 51.

<sup>3</sup> Philippe J. Maarek, *La censure cinématographique* (Paris: Libraries techniques, Toulouse: Imprimerie du sud, 1982), 75.

<sup>4</sup> René Prédal, *Le cinéma français depuis 1945* (France: Nathan, 1991), 131.

<sup>5</sup> James Monaco, *How to Read a Film* (New York: Oxford University Press, 1981), 264.

<sup>6</sup> Alexandre Astruc quoted in Prédal 113.

<sup>7</sup> Monaco, 263.

<sup>8</sup> Astruc quoted in Prédal 113, my translation.

<sup>9</sup> Monaco 258.

<sup>10</sup> Jean Collet quoted in Douin 29, my translation.

<sup>11</sup> Monaco, 79.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid., 284.

<sup>15</sup> Prédal, 130.

<sup>16</sup> Douin, 34, my translation.

<sup>17</sup> Frédéric Strauss, "Chabrol, maître de cérémonie," *Cahiers du Cinéma* 494 (September 1995): 25, my translation.

<sup>18</sup> Ramasse quoted in Douin 34.

<sup>19</sup> Ibid., 36.

<sup>20</sup> Ibid., 37, my translation.

<sup>21</sup> Frodon, 19.

- 22 Ibid., 48, my translation.  
23 Monaco, 184.  
24 Frodon, 75.  
25 Bernard Bastide in Michel Estève, ed., *Agnès Varda: Etudes cinématographiques*, n° 179-186 (Paris: Minard, 1991), 5.  
26 Frodon, 20.  
27 Frank Curot in Estève 157, my translation.  
28 Ibid., my translation.  
29 René Prédal in Estève 19.  
30 Ibid., 19-20, my translation.  
31 Ibid., 19.  
32 Ibid., my translation.  
33 Ibid., 13, my translation.  
34 Prédal, 149.  
35 Prédal in Estève 17.  
36 Prédal, 130.  
37 Prédal in Estève 18.  
38 Monaco, 265.  
39 Marguerite Duras quoted in Cinémathèque française, *Marguerite Duras* (Paris: Cinémathèque française, 1992), 13.  
40 François Barat and Joël Farges, eds. *Marguerite Duras* (Paris: Editions Albatros, 1975), 187-88.  
41 Duras quoted in Cinémathèque française 13.  
42 Joël Magny quoted in Cinémathèque française 16.  
43 Madeline Borgomano, *L'écriture filmique de Marguerite Duras* (Paris: Editions Albatros, 1985), 9, my translation.  
44 Ibid.

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# THE WORLD WE ARE ABOUT TO CREATE

BY CARL-JOHAN NORDBERG

*"Anyone who is dreaming of a trip to the moon can get a little foretaste of it by climbing about on the dead volcanic cones of Easter Island. Not only does his own hectic world seem immeasurably distant, but the landscape can easily give the illusion of being on the moon: a friendly little moon hung between sky and sea, where grass and ferns cover treeless craters which lie gaping sleepily toward the sky."*<sup>1</sup>

—Thor Heyerdahl,  
Aku-Aku, the Secret of Easter Island

## INTRODUCTION

**I**n 1722, the Dutch navigator Jacob Roggeveen discovered a before unknown island in the South Pacific Ocean on Easter Day. He gave it the name Easter Island. Roggeveen found a destroyed vegetation and a poor people. What has become most famous about Easter Island is its giant stone statues, which are lined up at the coast, facing the Pacific Ocean. Without these mighty witnesses from the past, the island would not be known but to a handful of people. These huge statues, called *moai*, have fascinated and kept scientists and ordinary people busy since the island was discovered. The question has always been how the inhabitants of Easter Island could construct and transport these enormous statues, because there is virtually nothing present that could have been used as tools.

Scientists have now discovered that Easter Island once was a tropical paradise supporting a large variety of animals, a diversified flora, and a creative people. But how could this paradise turn into a solitude without life? Why can we not find the same environmental characteristics we find on other South Pacific islands? It is believed that the people exploited the land so much and so fast that the vegetation was not able to keep up with the speed of destruction. The consequence was that more and more plants, trees, and animals disappeared.

What kind of lesson can we learn from the example of Easter Island? Is Easter Island a small prototype of what will happen to our civilization? Are we able to recognize the warning signs nature gives us?

#### THE FIRST ENCOUNTER WITH EASTER ISLAND

Easter Island is located in the South Pacific. There is no life around the island for thousands of miles. Tahiti is about 2,600 miles west of the island, and 2,300 miles to the east is Chile, of which Easter Island has been part since its annexation in the nineteenth century. Richard Conniff describes the island as "a rock in the center of a vast circle of sea."<sup>2</sup> The island is shaped like a triangle. Volcanic in its origin, the island covers 64 square miles. The settlement of Easter Island is believed to have begun 1,500 years ago, approximately in A.D. 400.

When Roggeveen first arrived on the island, he was surprised. This South Pacific island was completely unlike other islands in the region in its appearance; other islands had a vast and rich vegetation. On Easter Island there were no trees to be seen, no animals, and very few plants. The island consisted only of grassland, no bush or tree was taller than 10 feet. The natives did not have any wood to burn during the wintertime to get heat. The only animals were chickens. Roggeveen estimated the population on the island at nearing 3,000 people.

Of course, it was impossible for Roggeveen and his fellow sailors not to focus their attention on the huge stone statues.

There are 261 of those monuments on Easter Island which reach a height of up to 30 feet and a weight up to 80 tons.<sup>3</sup> All of these *moai* were built and shaped in the quarry of *Rano Raraku*, a volcano located on the east side of the island. The question is how this primitive people were able to transport these huge statues from the quarry to the coast, which was 6 miles away. Roggeveen did not notice any trees which could have been processed and served as means of transportation. They did not know of the wheel and they did not have any draft animals.

However, it is clear that these monoliths could only have been built by a people who were more numerous and better organized than the small underdeveloped social system Roggeveen encountered upon his arrival. There must have been a complex social structure with workers, priests, and administrators, which are all characteristics of an ancient advanced civilization. What did occur to that society?

#### FROM PARADISE TO NO-MAN'S-LAND

We know the answer to this question to some extent today. Thanks to the latest technology in archaeology, paleontology, and analysis of pollen, we know much more than a few years ago. The first settlement began around A.D. 400. The height of the Easter Island culture is assumed to have been from 1200 to 1500. This was also the period when the stone statues were raised. After 1500, the making of these huge monoliths stopped abruptly. Excavations of former settlements let scientists reach the conclusion that about 10,000 to 20,000 people lived on Easter Island.<sup>4</sup>

Experiments with contemporary islanders have shown that twenty people equipped only with chisel could shape such a big stone statue within one year's time. With sufficient ropes and wood, those people could transport the monoliths for miles and then raise them. But to be able to do all this, there had to be one prerequisite on Easter Island which was not apparent: trees. Ropes could be made from a small tree called *hauhau*, which grows on the island. In order to transport and raise a *moai*,

hundreds of feet of rope would have been necessary. But the *hauhau* is represented too scarcely on the island today to provide a sufficient amount of rope for only one of these statues.<sup>5</sup> This leads to the theory that once there must have been enough trees on this island to provide for the transportation and the raising of the monoliths.<sup>6</sup>

From analyses of pollen which have been made in the past years, we know that the island actually used to be forested. John Flenney of the Massey-University in New Zealand describes the island as having been covered with a subtropical forest, including trees, bushes, and fertile land.<sup>7</sup> This is hard to imagine if one sees the island today. Now we know that the Polynesians, who first arrived on the island, had developed agricultural settlements and possessed the necessary materials to pursue their building of stone statues.<sup>8</sup>

Another theory which enforces Flenney's theory about a formerly existing subtropical forest on Easter Island is stated by David Steadman from the state museum of Florida. He examined the leftovers from food from early settlers. He found that the main source of calories in their diet had been fish.<sup>9</sup> Among the bones he discovered, about one third were from dolphins which weighed 150 pounds and could not have been fished from the shore.<sup>10</sup> This indicates that the islanders must have had boats which had the capability of going out far into the sea to capture dolphins. When Roggeveen arrived he was met by boats which were hardly floatable. Therefore, wood must have existed on the island in large amounts in earlier times, if the islanders were able to sail out far into the ocean.

The Polynesians also had twenty-five different kinds of sea birds and six kinds of land birds on their menu.<sup>11</sup> The island is supposed to have been an ideal breeding place for them. The available wood provided people with the necessary fuel to make fires and guaranteed that the birds could be cooked.

All this leads us to the conclusion that most of the once-blooming vegetation must have disappeared. Several explanations are being offered. One of them is described by Richard

Conniff, as he writes that the "...settlers gradually cleared the forest to plant the taros, yams, sweet potatoes, bananas, sugar cane, and paper mulberries they carried with them in their canoes."<sup>12</sup> The forest was being destroyed to allow more agricultural activity on the island. More and more of the beautiful vegetation disappeared. The deforestation could not be stopped anymore and the appearance of the island changed drastically. As we know from analyses of pollen, palms disappeared after 1400. The *hauhau* tree did not perish but there were not enough left to make ropes.

In the fifteenth century, all of the existing trees vanished. The trees had been cut down not only to allow for more agricultural activities, but also because of the need to build more canoes and for more *moais* to be transported. Suddenly, the people of Easter Island were faced with an enormous environmental challenge. Not only the trees vanished but also most of the birds died out. There are no more bones of dolphins found after 1500. Because the deforestation supported the erosion of the soil, the harvests became smaller and smaller. Production of food was, therefore, severely constrained.

The islanders were suddenly faced with a completely new problem: hunger! They had been living in abundance for many generations and centuries, but suddenly, their economical system collapsed. The islanders were confronted with a basic problem: how to produce food. As a result, it is estimated that approximately one fourth of the population died.<sup>13</sup>

#### OTHER EXAMPLES FROM THE PAST

This is not the first time in history that a culture declined because of deforestation. In the book *Ecology in Ancient Civilizations*, J. Donald Hughes examines the effects of deforestation in more depth. Although Easter Island is not counted as one of the big and important ancient cultures, there are many parallels which can be drawn.

Hughes concentrates on the ancient civilizations around the Mediterranean Basin. This includes the Romans and Greeks. He

goes after the question of how those civilizations affected the environment, especially the ecology. Before Greece became a highly developed civilization and culture, the hills and mountains around Athens and of most other parts in Greece were covered by forest. After the "Golden Age of Athens,"<sup>14</sup> the mountains were dry, rocky, colorless, and only small bushes were able to grow there. The Roman Empire had other experiences with the environment. In order to be able to provide all its citizens with food, the Empire had to go to war and annex various other regions which could provide the Roman people with food. These other regions were exploited to the limit. The former colonies in North Africa give us an example of how the Romans mistreated the soil.<sup>15</sup>

The earliest settlers in the Mediterranean Basin were forced to find a new place to live which could provide them with a basic caloric sustenance. They were dependent on agriculture and especially on hunting. If the animals they hunted moved, the hunters moved as well. The Greek attitude towards nature was that plants and animals existed to serve mankind. They saw themselves as the living animal which was cleverer and more sophisticated than all other animals and thus, they could use their hands to manipulate nature.<sup>16</sup>

As on Easter Island, deforestation is seen as one of the major reasons of the decline in the Greek civilization. Wood was used as fuel and was necessary for all sorts of construction. As soon as the land was bare of trees, the heavy rains washed away the now-unprotected earth. Erosion took place and agricultural production declined rapidly. In order to provide all people with food, the Greek farmers were forced to squeeze out as much output as possible from the arable land. This led to an intensive agricultural system with three harvests a year. As a result, the agriculturally productive land suffered. Half the area of Greece was once covered by trees; now less than one tenth of the area consists of forests.<sup>17</sup>

Although the Roman attitude towards the environment was strongly influenced by the Greek, Romans nevertheless devel-

oped their unique way of thinking. For the Romans, the land was sacred. They were the first people to talk about "Mother Earth." The Romans believed that everything in the world had its rational purpose. Hughes summarizes their viewpoint in this way: "Plants exist for the sake of animals, animals for the sake of mankind, and mankind exists to contemplate and imitate the perfection of the world."<sup>18</sup> The changes in the environment caused by the Romans were severe, because they were highly organized and far more skilled than any people before them. As in Greece, the loss of forests was the most widespread change. The Romans needed large amounts of wood for fuel and also for construction purposes. But one of the most intense sources of demand for wood in the Roman Empire was the military.<sup>19</sup> They needed very large amounts of wood for the construction of their navy, especially during the war against Carthage. The demand for wood among the land troops was environmentally damaging as well. In the lowlands, the forests were mostly cleared to create space for further cultivation opportunities. As a result of these clear-cuttings, flooding increased and erosion accelerated. Even the city of Rome itself suffered some serious flooding.<sup>20</sup>

This is very similar to what happened on Easter Island. Ancient Greece and the Roman Empire both lost their predominance after their unsustainable exploitation of the environment became irreversible. Of course, deforestation is not the only reason for the decline of these early superpowers, but it was one of the major factors for their downfall. Yet, the people of those two empires were more fortunate than the population of Easter Island. People in the Mediterranean could always move to another region in which the devastation was not that advanced. Their countries covered larger territories, could support more people, and import wood from other regions. Easter Island is small and surrounded by water. The closest neighbor is over 2,000 miles away. No wonder that so many people died from starvation because of the devastation of the environment on Easter Island.<sup>21</sup> Hughes already reaches a conclusion in the beginning of his book, stating: "The conclusion seems inescap-

able that the natural environment and the course of civilizations were interrelated."<sup>22</sup> He uses the past tense in his sentence because he refers to the ancient civilizations of Greece and Rome. I would argue that we can appropriately apply his conclusion to our present time.

## OVERPOPULATION

In Easter Island, deforestation coupled with overpopulation led to a significant fall in the supply of food and to the rapid decrease of their culture. As proven by radiocarbon dating and genealogical evidence, a population crash is estimated to have taken place around 1680 A.D.<sup>23</sup> This rapid decline in population started with a war, in which the islanders split into two factions which fought each other almost to extinction. The winning side split into clans and continued the war. Scientists have found strong evidence that the people turned to cannibalism.<sup>24</sup> Apparently, the food situation must have become so critical that people, in desperation, started to eat each other's flesh.

William R. Catton, Jr., discusses the problem of overpopulation in his article "Carrying Capacity and the Death of a Culture: A Tale of Two Autopsies." He begins by explaining the meaning of "carrying capacity." Carrying capacity is the amount of people which the environment can provide with nutrition and shelter. If this capacity is exceeded for a longer period of time, it can have a highly negative impact on the environment and on the people living there, which in most cases leads to destruction, chaos, and famine. "Human loads that exceed carrying capacity stress ecosystems. Ecological stresses translate into economic problems. These, in turn, produce social stresses such as hunger, demoralization and force migration."<sup>25</sup> Exceeding carrying capacity can be reached by overfishing, deforestation, and overgrazing.

The number of Polynesians who arrived on Easter Island probably fit in no more than two canoes. The reasons for their escape from Polynesia remains unknown, but it is likely that they

fled because of population pressure.<sup>26</sup> Up to the population crash around 1680, the population of the island probably experienced a rapid growth. This increase in population continued until the carrying capacity had been exceeded for so long that nature could not provide the population with nutrition anymore.

Catton makes an interesting comparison with another country that underwent a population crash: Ireland. Catton asks how much the pre-crash population on Easter Island was. We know from Roggeveen that the population in 1722 was about 3,000. Catton compares Easter Island to Ireland in 1845, when Ireland experienced a rapid decline in population because of the potato blight. After some basic calculations, he reaches the conclusion that about 12,000 people must have been living on Easter Island before the crash in 1680. Catton states that "it was possible for a population to overshoot its habitat's carrying capacity for a while by consuming the productive resource base itself."<sup>27</sup>

The population Easter Island could have supported indefinitely could never have exceeded 3,000 to 4,000 people.<sup>28</sup> After their civil war that ended in genocide, postwar chaos, and a further decrease of the population because of slavery trade organized by Chileans, there were no more than 111 people left on the island in 1877.<sup>29</sup> This development was necessary according to the theory of carrying capacity. It says that if the carrying capacity is exceeded, it can go back to normal, but not before the population decreases to the point where it can live off the now heavily reduced resource base.

## CONCLUSION

What does the environmental decline of past civilizations mean for today's society? It is clear that all civilizations today are demanding much effort from the environment. Deforestation expands faster and to a greater extent than ever before in history. One must only think of the rain forests in Brazil or Asia. We do not know exactly what the complications of this clearing will be yet, but the ancient empires of Greece and Rome give us a

precedent. However, added to deforestation, pollution of the sea, air, and land depletes the environment even more. Furthermore, we are destroying the vital layer of ozone. J. Donald Hughes suggests that we have to change our attitude towards nature if we want to avoid disaster.

It is evident that the modern ecological crisis is to a great extent the result of attitudes which see nature as something to be freely conquered, used, and dominated without the calculation of the resultant cost to mankind and the earth.<sup>30</sup>

Since the industrial revolution, the human race has developed more and more "resource-consuming and environment-impacting technology."<sup>31</sup> Often this new technology has had hazardous consequences for the environment. I am thinking of the internal combustion engine as a valid example. With the increase of knowledge, we were able to create substances, such as pesticides, which we thought would reduce problems, but they proved to have a far more costly outcome than their benefits. The importance of money plays another role in forming our attitude towards nature. Nature provides us with resources which are scarce and therefore valuable, such as oil. Therefore, we want to generate profit by transforming these resources into materials people use in their daily lives, which therefore can be sold.

But it was not only the destruction of the natural resources on Easter Island that caused its downfall. It was the combination of the exploitation of the soil and the large size of its population that led to this drastic and tragic development. William R. Catton, Jr., writes that the world as a whole today has the same increasing rate of population as Easter Island did. Greenwatch discusses the impact of overpopulation on Easter Island in its article "The lesson of Easter Island". It emphasizes the process which we are already familiar with: "Human overpopulation exhausts the earth, which, in turn, can no longer feed the people."<sup>32</sup> Easter Island had a population density per square mile of 188 people just

before the crash. Compare that number to today's density of 69 people per square mile in the United States, 588 in Germany, and 857 in Japan!<sup>33</sup> Many third-world countries have a severe problem with population growth today. Food, wealth, and power must be distributed more equitably among the world's population. Otherwise, people in the most disadvantaged parts of the world will still view it as a primitive retirement plan to have as many children as possible.<sup>34</sup>

Today's societies cannot hide from the fact that they are heading towards the same deep abyss as Easter Island once did. The question is if we have already exceeded the carrying capacity and if so, how long will it take until it ends in a catastrophe? In a conference held in Washington, D.C., in 1993, scientists from various fields from the entire United States presented their points of view related to today's environmental carrying capacity. The result was unanimous and cannot be mistaken: "There was near consensus among them that the world and the United States have both already surpassed their respective human carrying capacities."<sup>35</sup>

Easter Island is being referred to as a "preview in microcosm...worst case,"<sup>36</sup> or "an ecological memorial."<sup>37</sup> Still, there remain some mysteries and questions about Easter Island which will never be solved. The question for the world today is whether we can still sustain our excessive life-style by wasting such a great amount of unrenovable resources without falling onto our nose. The future will give us the answer and show us if we are able to learn from history. And if the worst case occurs, let us hope that the consequent crisis will take a more humane, less dramatic, and more peaceful outcome than it did on Easter Island.

#### END NOTES

<sup>1</sup> Heyerdahl, Thor. *Aku-Aku, the Secret of Easter Island*. English. 1958. Chicago: Rand McNally, 1958. American edition, 85.

- <sup>2</sup> Richard Conniff. "Easter Island Unveiled." *National Geographic*, March 1993 v183 n3 p5(26), 56.
- <sup>3</sup> Reto Pieth. "Als die Natur kaputt war, war es auch die Kultur." *Weltwoche*, February 1st, 1996, number 5, 49.
- <sup>4</sup> Ibid, 49.
- <sup>5</sup> Ibid.
- <sup>6</sup> Ibid.
- <sup>7</sup> Ibid.
- <sup>8</sup> Ibid.
- <sup>9</sup> Ibid.
- <sup>10</sup> Ibid.
- <sup>11</sup> Ibid.
- <sup>12</sup> Richard Conniff. "Easter Island Unveiled." *National Geographic*, March 1993 v183 n3 p5 (26), 76.
- <sup>13</sup> William R. Catton. "Carrying Capacity and the Death of a Culture: A Tale of Two Autopsies." *Sociological Inquiry*, Spring 1993 v63 n2 p202 (22), 216.
- <sup>14</sup> Hughes, J. Donald. *Ecology in Ancient Civilizations*. (Albuquerque: University of New Mexico Press, 1975), 61.
- <sup>15</sup> Ibid., 102.
- <sup>16</sup> Ibid., 60.
- <sup>17</sup> Ibid., 70.
- <sup>18</sup> Ibid., 95.
- <sup>19</sup> Ibid., 100.
- <sup>20</sup> Ibid., 102.
- <sup>21</sup> Pieth. "Als die Natur," 49.
- <sup>22</sup> Hughes. *Ecology*, 2.
- <sup>23</sup> Catton. "Carrying Capacity," 215.
- <sup>24</sup> Ibid., 216.
- <sup>25</sup> Ibid., 203.
- <sup>26</sup> Ibid., 213.
- <sup>27</sup> Ibid., 216.
- <sup>28</sup> Ibid.
- <sup>29</sup> Richard Conniff. "Easter Island, " 62.
- <sup>30</sup> Hughes, J. Donald. *Ecology*, 148.
- <sup>31</sup> William R. Catton Jr. "Carrying Capacity," 218.

<sup>32</sup> Greenwatch, "The Lesson of Easter Island." *UNESCO Courier*, June 1994 p28 (1), 28.

<sup>33</sup> *The World Almanac and Book of Facts*. New Jersey: Funk and Wagnalls, 1994, 833, 789, 769.

<sup>34</sup> Greenwatch, "The Lesson," 28.

<sup>35</sup> As quoted in Catton, "Carrying Capacity," 219.

<sup>36</sup> *Ibid.*, 218.

<sup>37</sup> Pieth, "Als die Natur," 49.

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## A STRONGER WORLD: COMPASSION IN MAHAYANA BUDDHISM

BY LUKE OWENS

As the seeds of Therevada Buddhism, the oldest form of the Buddhist religion, took root in the hearts and minds of many cultures, new variations of Buddhism began to blossom out of the roots of the old, fostering new beliefs and new practices. Although Therevada remained, a new branch of the religion, called Mahayana Buddhism, emerged. As Buddhism reached countries such as Japan and Tibet, its essence became quite altered.<sup>1</sup> In contrast to Therevada's clear focus on the enlightenment of the individual as the culmination of the spiritual quest, Mahayana Buddhism promotes compassion as the supreme characteristic of enlightenment. That is, salvation for the individual is never complete unless the whole of humanity is freed from obscurity of spiritual vision and rises to an enlightened communion with the universe.<sup>2</sup>

Mahayana Buddhism embodies a spirit of undying compassion. The key to understanding this particular incarnation of Buddhism requires an exploration of the many beliefs and practices that, according to Mahayana Buddhists, promote compassion. The foundation of Mahayana Buddhism lies in an understanding and awareness of death's presence in life. The philosophical structure expands from this to include awareness of Buddha-nature, the existence of bardos, the role of the Bodhisattva, and the practices of Phowa and Tonglen, all to be elaborated in detail below. For the most part, Mahayana Buddhism, although often alienating to those socialized under a Western point of

view, stands on its own as an integrated, holistic system of beliefs.

Mahayana Buddhism, from the Mahayana point of view, is an improvement, a furthering, of Therevada Buddhism. The term "Mahayana" means "greater vehicle," while "Hinayana" (the Mahayana word for the Therevada denomination) means "lesser vehicle."<sup>3</sup> To avoid the apparent condescending attitude of early Mahayana Buddhists, the term Therevada was adopted, meaning "the way of the elders." Regardless, Mahayanans do believe that their form of Buddhism is an advancement of Buddha's teachings, and thus a more elevated manifestation. Mahayana Buddhism is structured around teachings purportedly spoken by the Buddha yet never recorded or recognized by Therevada elders. The obvious question at hand is how were the Mahayana followers able to reconcile the resulting inconsistencies? Mahayana strives for compassion and salvation for all things, not, as in Therevada Buddhism, individual enlightenment. Could the Buddha have given two contradictory teachings?

The Mahayana Buddhists solve this problem, and at the same time manage to outline their belief system, metaphorically, through the parable of the Burning House.<sup>4</sup> The parable tells the story of a wealthy father's house on fire. The father has already escaped, but his children are trapped inside. Being "pleasurably absorbed in amusements without apprehension," the children do not have any idea their house is about to be destroyed. The father, naturally, must endeavor to save them. Instead of using physical strength to valiantly rescue them from the burning house, the father opts to use his wits. He warns them of the impending danger, imploring them to escape, but they do not understand. The wealthy father then decides to lure them out. He calls to them, promising to give them carts of toys and trinkets and riches, anything their hearts desire. He offers a different cart to each child, all of different value. The children come gladly out of the burning house to collect the riches their father promised.

Upon reaching safety, however, the father does not give each child what he promised. Instead, he gives, to all of them equally, one Great Cart of interminable wealth.<sup>5</sup>

In comparison, the Buddha is akin to the father, whose children are the whole of humanity, trapped in a "burning house" of desire and unhealthy attachment to the objects of that desire. Mahayana Buddhism claims that just as the children cannot understand their father's warnings, as long as we are stuck in the burning house we cannot comprehend Buddha's compassionate teachings.<sup>6</sup> Like the father, the Buddha had to lure humankind out of the burning house not by straightforward teaching but *tactful* teaching. Emily Dickinson wrote: "As Lightning to the Children eased/With explanation kind/The truth must dazzle gradually/Or every man be blind."<sup>7</sup> The same circuitous path of revelation is at work in Mahayana Buddhism. Buddha cannot reveal what we are not ready to see, so he decrees his knowledge step by step. This is how Mahayana Buddhism explains the existence of Buddha's "new" teachings. The Therevada teachings are seen as mere preliminaries that served to quickly lure us out of the "burning house," as it were. Once his followers were safely out of this obscurity of heart and mind, Buddha revealed his greater gifts and more involved teachings. This is the "Great Vehicle" from which Mahayana Buddhism takes its name, and the beginning of the teaching of compassion as the cornerstone of spirituality.<sup>8</sup>

The most significant basis for this compassion begins with an awareness and an understanding of death. Sogyal Rinpoche outlines these concerns in his work *The Tibetan Book of Living and Dying*. Modern society dictates that death is, for lack of a better term, the end of life, something unknown and unreal which must be avoided or forgotten. Denial, then, is the most popular means of coming to terms with death. We essentially "put off" even thinking about death, storing it safe in the far future where it cannot haunt us. The effects of this are disastrous, as Rinpoche points out. Without a firm, thoughtful grip on what happens to us when we die, our lives become devoid of vision or compas-

sion.<sup>9</sup> Buddhism offers a different perspective on death. "Life and death are seen as one whole, where death is the beginning of another chapter of life. Death is a mirror through which the entire meaning of life is reflected."<sup>10</sup> Indeed, without death, life would become meaningless; the two contraries are necessary for human existence.

We must make death a part of our lives, as Tibetan (Mahayana) Buddhism tries to teach us. Instead of closing our eyes to death's frank and insistent presence, we must face it. Death cannot be ignored. Each moment of life may be our last.<sup>11</sup> Often we avoid all these realizations by preoccupying ourselves with countless other tasks. Like the children in the burning house, we fixate on life and all the material things this technological world can provide for us, never facing the real issues, never understanding what the world truly has to offer. Death is imminent, omnipresent, and the things we cling to are transitory. It is no wonder we suffer.

In a world where death waits just around the corner and life is inevitably rounding that corner, where in Mahayana Buddhism can one turn to for relief, for reassurance? What is at last stable? Nothing, in fact, is stable — except that nothing is. As Rinpoche puts it, "impermanence is paradoxically the only thing we can hold onto, perhaps our only lasting possession."<sup>12</sup> Although this paradox of impermanence may seem difficult to accept, it is essentially the only absolute. Everything changes; even our thoughts, our minds, are as fleeting as the rest of the universe.<sup>13</sup> We must live in tandem with death and impermanence, never projecting ourselves into the future or the past, living moment by moment. Just as we are inevitably condemned to die, so is each moment in time. Yet the universe continues. Mahayana Buddhism teaches us to dance this dance of death and change, as it is the only way to keep in step with existence.

An understanding of impermanence and an encompassing perception of the many interconnections of our existence will lead, Tibetans say, to a full realization of the true nature of mind. This apprehension, or something much like it, occurs to many

unenlightened people on rare occasions, with a sudden solution or epiphany that, just for an instant, wipes clear the canvas of the mind. Sogyal Rinpoche describes his awakening to the nature of mind in this way:

Suddenly [my master] sprung on me a question with no answer: "What is mind?"...I was taken totally by surprise. My mind shattered. No words, no names, no thought remained — no mind, in fact, at all...Past thoughts had died away, the future had not yet arisen; the stream of my thoughts was cut right through. In that pure shock a gap opened, and in that gap was laid a bare a sheer, immediate awareness of the present...radiant with the warmth of an immense compassion.<sup>14</sup>

Such is the vast, compassionate emptiness of the nature of mind described by one who has experienced it. Buddhism's impermanence concept follows logically into this concept of mind. Because nothing is stable and our thoughts come and go, our minds are "empty" of any constancy. Awareness of this emptiness promotes the Buddhist experience of a naked and pristine consciousness. In order to reach this state, as Sogyal Rinpoche has, we must learn to ignore what Buddhists call the "ordinary mind."<sup>15</sup>

To elucidate, Tibetan Buddhism names two different kinds of mind, the ordinary mind and the "true," or Buddha mind. The Buddha mind is the "compassionate emptiness" discussed above, but the ordinary mind is quite different. It is our thinking mind, the part of us which becomes attached, which desires, fears, and manipulates. The Tibetans describe it as a "crooked politician," always deceiving the "true" mind. The ordinary mind only exists in relation to something outside of it; it perceives itself as "one thing" and the rest of the universe as "some other things." This may seem silly, but effectively illustrates the Tibetan belief that

"to realize the nature of the mind is to realize the nature of all things."<sup>16</sup> That is, the entire universe is illuminated by Buddha-nature. Inherently, the true mind resides within us all, not only humans, but plants, animals, and stones as well. This is one of the most important reasons why Mahayana Buddhism teaches compassion: it perceives all people as united in a struggle against their ordinary minds. Since the quest for spiritual fulfillment is universal, we must spread compassion to the world around us.

The Mahayana teaching of universal salvation and compassion is represented by the Bodhisattva, one who puts aside withdrawal into Nirvana (Buddhism's heavenly peace for the enlightened) and remains on earth to aid others to enlightenment. A Bodhisattva believes that his salvation is meaningless and incomplete without the salvation of the entire world. Thus his task is never complete, and he remains always within the cycles of samsara (worldly existence), helping and aiding in his particular way the salvation of humankind.<sup>17</sup> Likewise, the Buddha himself, after reaching enlightenment, chose not to retreat to some esoteric state of supreme understanding. Instead, the Buddha shared his discoveries with others.<sup>18</sup> Even at the moment of his death, his becoming, he postponed dying in order to help his followers once more. Such is the boundless compassion of the Mahayana ideal; to the Bodhisattva, Nirvana and samsara are one and the same.

One of the most fascinating aspects of Mahayana Buddhism is its strict emphasis on reincarnation. Although a thousand arguments could be outlined to prove the truth or falsehood of reincarnation, this has no value to a discussion of the workings of Mahayana Buddhism. Reincarnation is accepted by the religion, and, whether taken metaphorically or literally, fits perfectly into the Tibetan spiritual canon. Buddhist reincarnation is based on the concept of the "continuity of mind."<sup>19</sup> Although Buddhism does not uphold the existence of an abstract, unchanging soul, it does project something called "subtle consciousness," which continues from one form to another.<sup>20</sup> Rebirth is compared to dice stacked upon one another: there is no thread connecting

them, no solid form holding the dice together; rather, each successive die is dependent on the one before it, and so on.<sup>21</sup>

This illustrates another important Mahayana concept, "karma." "It is because of our actions in one life, pure or impure, that we are linked to another life, and we are not free from the results."<sup>22</sup> Such is the nature of karma, the accumulation of actions and the corresponding results they bring. Karma is, simply, a universal law of cause and effect. As far as rebirth is concerned, the law of karma proclaims that if the culmination of one's actions in this lifetime is favorable, the next life will thrive from this favor, and vice versa. Cities, nations, and the entire world all have karma, dense and profound in its intricacies. As Buddha said, "What you are is what you have been, and what you will be is what you are now."<sup>23</sup> Once again, the threads of compassion are woven into this aspect of Buddhist philosophy. Because of this law of cause and effect, if we do harm to someone in our life, we will be harmed ourselves. If we promote goodness and compassion, however, we too shall receive good things in the future.<sup>24</sup>

Within the concept of reincarnation are phenomena called bardos. In Tibetan Buddhism, bardos are transitional phases between one absolute situation and another.<sup>25</sup> The only absolute states, apparently, are death and rebirth. The in-between states are an important concept, however, as the whole of our existence is divided into four different bardos. The first bardo is that of life, from the time we are born until we die. Although this seems like a long time for just a transitional phase, it is indeed the "gap" between birth and death in which we become accustomed to death's absolute. The second bardo is the bardo of death. When we begin to die, another transition begins, this time from the uncertainty of life to the emphatic realization of the nature of mind, which, Buddhists say, can occur at death. The third bardo is the period after death in which we "experience...the radiance of the nature of mind,"<sup>26</sup> and the final "bardo of becoming" is the state before we begin a new life.

The variety of Buddhist jargon is overwhelming in this instance. These bardos are not so removed from our day to day lives as they may seem, however. In actuality, what Buddhists understand as bardos are happening constantly throughout our lives. Psychologically, we travel through our own bardos. After a traumatic experience, we are filled with uncertainty and confusion, which often leads to wisdom and clairvoyance. The problem is that we never really notice these as what they are and thus gain nothing from them.<sup>27</sup> Awareness of these bardos in ourselves and in our environment is part of becoming an enlightened being, shedding the trappings of the ego-self, and realizing the inherent luminosity and compassion in the world.

In addition to this philosophy of compassion, Sogyal Rinpoche also outlines some practices to expand, channel, and direct our compassion. The first of these is called "Tonglen," which means "giving and receiving" in Tibetan. This practice is a kind of "opening" of compassion within ourselves and directed at others.<sup>28</sup> Basically, Tonglen details an array of practices aimed at this unveiling of compassion. For instance, Sogyal Rinpoche tells us to envision a circumstance in our life when someone showed great love and compassion toward us. Remembering this feeling and focusing on it will help promote our own sense of self-compassion, so that we may, in turn, project this to others.<sup>29</sup> Exercises include taking the place of the person in pain, thinking of the object of compassion as an old, faithful friend, and so on. Although these practices seem simple and clear-cut, Rinpoche claims it is important to be extremely practiced and familiar with them. Without knowledge of such things and their hidden intricacies, it can be hard for us to manage and direct our compassion appropriately.<sup>30</sup> Rinpoche suggests that we move in small steps, first practicing compassion for ourselves, then for our environment, our family, friends, and so on,<sup>31</sup> until the whole of our existence is gently draped in a warm blanket of love and kindness. These practices will purify our minds of all selfish craving and the objects cherished only by our selfish egos. As

compassion increases, we are able to take someone else's place, taking on and relieving their suffering.<sup>32</sup>

Another essential practice of compassion is called the "Phowa" practice. This is used chiefly to care for the dying. One creates a visage in the mind of an embodiment of truth and spirituality, be it a golden light, a Buddha, or Christ, and immerses one's mind in this perfect, enlightened presence.<sup>33</sup> In a sense, it seems that the idea is to "empty" the mind, just like Tonglen, filling it only with that compassionate emptiness of Buddha mind. Rinpoche says that the ultimate end of this practice is to prepare ourselves for the moment of death, when, if we have practiced Phowa, our mind will immediately fill with a compassionate void, ready to become one with Buddha-nature.<sup>34</sup> This can also be used to evoke compassion for one who is dying. By transferring the image of truth and Buddha-hood into the dying person, we provoke compassion for them both in ourselves and in them. If we immerse them in this light, Tibetans believe, they will die with dignity and love.<sup>35</sup> As Sogyal Rinpoche expands on the different practices involved in Phowa, some of the inevitable questions arise concerning the somewhat insubstantial nature of Tibetan spiritual ideals. For example, Phowa also includes something called an "ejection of consciousness."<sup>36</sup> This means that, at the moment of death, one would simply "eject" his or her subtle consciousness and merge it with the Buddha mind in preparation for the next life. Even with an understanding of these terms, the actual event remains practically inconceivable. Yet Rinpoche continues on, describing that, after much practice, a Phowa expert shows signs of accomplishment such as "itching at the top of the head, headaches, the emergence of a clear fluid, a swelling...around the area of the fontanel, or even...a small hole there, into which traditionally the tip of a stalk of grass is inserted as a test or measure of how successful the practice has been."<sup>37</sup> The image is quite ludicrous: dozens of Tibetan monks wandering around with grass stuck in their skulls and muttering about Buddha-consciousness. To the inexperienced and uninitiated,

this seems farfetched and absurd. Does this retain meaning or significance, even on a metaphorical level? Unfortunately, it is very difficult from an elementary understanding of the presuppositions of such a practice to even begin to make sense of it. Perhaps it must, for the time being, be taken as an anomaly, left to those who truly practice it to believe and understand it for themselves. It is, after all, only peripheral to the core of Buddhist thought.

Other troublesome issues in Mahayana Buddhism are more easily solved. Reincarnation, for example, may seem farfetched and ill-proven. If we step away from the literal sense in which Sogyal Rinpoche describes it, however, reincarnation fits perfectly into experiences we all know. Simply put, just as our lives are ever-shifting successions of bardos, so too we “reincarnate” or reinvent ourselves along the way. How often has a great crisis struck, causing immediate doubt and reconsideration of life? It is very true that we change, we move from one situation to the next, and, often, we must have a change of life. We start over with a new existence, and are reborn into life with altered perceptions.

Furthermore, the master-apprentice relationship between monks that Rinpoche discusses sheds light on the issue of reincarnation. Taken metaphorically once again, reincarnation could simply be a “passing down” of ideas and concepts from master to apprentice. Indeed, Rinpoche writes that the relationship is a “living transmission of truth, from mind to mind, from heart to heart.”<sup>38</sup> That is, the connection between a master and an apprentice is so integral, so profound, it is in itself a kind of transference of consciousness. From one great man to another, the teachings of the Buddhist spiritual path have been handed down for thousands of years. Can we not say, then, that the apprentice becomes a kind of figurative reincarnation of his master? He embodies the very heart of his master’s teachings, and even the heart of the master’s consciousness as well. The succession of masters can be traced back to the Buddha himself, just as we might trace back our families. A child inherits the traits of his parents, for good or ill, and thus the father or mother is

reborn in the child. By touching the hearts of others we surpass imminent death and raise ourselves to the eternal. Reincarnation is indeed a part of human experience, not mere mystical chicanery.

Furthermore, this notion suggests that the essence of what Rinpoche calls "subtle consciousness," that airy nothing of a "self," is the essence of what we communicate to others throughout our lives. It is this almost indiscernible flicker of consciousness that we pass on to the world around us, and that which, ideally, the world returns to us. What Mahayana thought teaches, ultimately, is that the spiritual epicenter of the human world — that implicit, eternal sense of Buddha-nature or God that we strive for — is not a singular spark within our separate selves. Rather, it exists "between" us: between a father and son, between a poet and a piece of paper. Salvation cannot be reached alone. Only together, in compassion, may we bring meaning to our lives.

Compassion, above all, is what is important about Mahayana Buddhism, not the mincing of vague words and metaphysical concepts. This religion helps us come to terms with our own mortality, with our very selves (or non-selves, as it were), so that we might love and cherish life both for ourselves and the world. Although we cannot really know whether such mystical teachings as consciousness ejection and reincarnation are true, we can, however, have active loving compassion for the world around us and try to help others do the same. It does not take any academic degrees to be a true Bodhisattva. For although we will soon pass away, we all have the ability to make it a stronger world, a stronger loving world, to die in.

#### END NOTES

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- 31 Ibid., 203
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<sup>37</sup> Ibid., 233

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# THE ECONOMIC IMPLICATIONS OF ACID RAIN

BY ANGELA PANTON

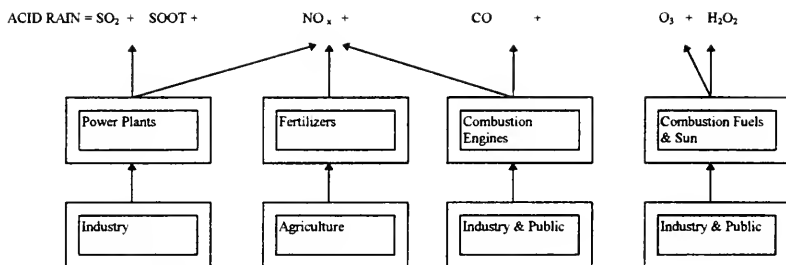
Often, we fail to see the effects of acid rain in our communities, and so we neglect to acknowledge the wider implications of acid rain on our planet. This invisibility factor, common to acid rain pollution, brings rise to the question of who is responsible for our acid rain problem. Acid rain is an externality; in other words, the culprits of acid rain are not immediately found in the same local area or even country and are not made responsible for their acts. Tests have shown that sulfur dioxide ( $\text{SO}_2$ ) emissions, which contribute in part to the high levels of acidity found in precipitation, can travel great distances before they will return to the earth in the form of acid rain. For far too long, industries have failed to recognize the economic implications of acid rain. Instead, it has been an area of concern for environmentalists. Governments have failed to effectively encourage industries to participate in the process of reducing acid rain. Consequently, industries have neglected to act independently in seeking more efficient means to combat acid rain. The reduction of  $\text{SO}_2$  and nitrogen oxide ( $\text{NO}_x$ ) levels in our environment is a problem that must be solved by both the government and the private sector. Economic theories can show that substantial reduction in acid rain levels occurs when government provides economic incentives to the private sector.

Acid rain was first recognized as an environmental concern in the 1960s, when fishermen observed that the numbers of fish in their regions were in decline. Scientists investigating the

Scandinavian, North American, and Scottish regions discovered that lakes within these areas tested for high traces of acidity, which was then linked to  $\text{SO}_2$  and  $\text{NO}_x$ . Since this discovery, the actual task of identifying the polluters has proved long and difficult. Although the term fails to convey the variety of its form, acid rain incorporates all forms of participation; that is snow, fog, mist, rain, and dry particles. The problem with acid rain lies not with its presence in the atmosphere, but with its recently higher levels of  $\text{SO}_2$  and  $\text{NO}_x$ . Sulfur emissions occur naturally and are generated from volcanoes, swamps, and the sea. However, when naturally occurring sulfur emissions form they can be absorbed into the environment at little or no cost to the ecosystem.  $\text{SO}_2$  and  $\text{NO}_x$  are also known as flow pollutants because at low concentrations these emissions can be absorbed into the environment. Nevertheless, manmade  $\text{SO}_2$  and  $\text{NO}_x$  result in the environmental and economic damage that is associated with acid rain, because the environment is unable to cope with massive amounts of pollution.

Acid rain is the combination of several deadly chemicals:  $\text{SO}_2$ ,  $\text{NO}_x$  and other atmospheric chemicals. The first,  $\text{SO}_2$ , is formed from the burning of fossil fuels from electric power plants. Fossil-fired power stations account for two-thirds of the world's electric power generating capacity, which is currently 2.6 million megawatts. The second,  $\text{NO}_x$ , is formed as a result of the combustion of fossil fuels from power plants, industrial processes, and internal combustion engines (i.e., cars).  $\text{NO}_x$  contributes one-half to two-thirds of the acidity found in rainwater in the United States. Finally, atmospheric chemicals are mixed together with  $\text{SO}_2$  and  $\text{NO}_x$  to form acid rain (see figure 1).

The private sector has faced many setbacks as a result of the increased levels of acid rain. Fishing and timber industries have suffered greatly because of the harmful and destructive effects of acid rain. Moreover, the effects of acid rain are also felt in other areas affecting the entire general public. Common public property such as buildings and bridges suffer intense erosion because of acid rain. Public health also raises concern; sulfate pollution is



$\text{SO}_2$  = Sulfur Dioxide  
 $\text{NO}_x$  = Nitrogen Oxide  
 $\text{CO}_2$  = Carbon Dioxide  
 $\text{H}_2\text{O}_2$  = Hydrogen Peroxide  
 $\text{O}_3$  = Ozone

FIG. 1. THE FORMATION OF ACID RAIN

Acid rain is composed of several chemicals:  $\text{SO}_2$ ,  $\text{NO}_x$ ,  $\text{H}_2\text{O}_2$ ,  $\text{O}_3$ , and soot. This diagram shows the origins of these chemicals and who can be blamed for acid rain. The boxes on the lowest level show that everyone contributes to acid rain. Therefore, it is not just big industry or farmers who are responsible — it is also the general public.

said to be responsible for up to 50,000 premature deaths per year in the United States.<sup>1</sup> The effects on wildlife from acid deposition varies. The impact on the ecosystem depends wholly on the extent to which the environment can absorb the content of the acidity. Nevertheless, acid rain has been discovered to be responsible for recent forest and waterway damage. In the United States, acid rain has produced devastating consequences such as the mutation of vegetation growth in Copper Hill, Tennessee. According to the Hubbard Brook Experimental Forest Program in the White Mountains of New Hampshire, the increase in acidity reduces the alkaline content of the soil. This means that the forests in a particular region affected by acid rain will experience the loss of essential minerals, such as calcium needed for tree growth.<sup>2</sup>

In northern Europe the effects of acid rain have also been severe. Some lakes are unable to support "sensitive aquatic life," which is detrimental to European fishing industries.<sup>3</sup> Health effects from exposure to  $\text{SO}_2$  include respiratory illness, provoking existing cardiovascular and lung diseases. These health problems affect the very young and the very old, causing severe implications for future productivity. Therefore, acid rain has escalated into a global concern, not only because of its environmental implications, but also for its economic impact.

#### WHO ARE THE POLLUTERS?

From figure 1 we can observe the primary polluters of  $\text{SO}_2$  and  $\text{NO}_x$  emissions are industry, agriculture, and the public. Therefore, we are all responsible for the increase in  $\text{SO}_2$  and  $\text{NO}_x$  emissions contributing to the higher levels of acidity in our environment. Nevertheless, the basic fact remains: the polluters are often not in the same region in which the effects from acid rain are felt. Therefore, implementing a final solution means all countries must work together to reduce the amount of pollution produced in their regions in order to curb the destructive effects of acid rain throughout the world.

## MARGINAL ANALYSIS

The marginal analysis theory provides economists as well as environmentalists with a framework in which to interpret the behavior of polluters within our environment. Acid rain results from an economic term known as an externality. An externality occurs as a result of an economic activity where producers and consumers impose a cost to other people external to that environment. Externalities are abundant in industries where property rights are not well defined. For example, two companies share the use of a river. The first company is an iron plant that dumps its waste into the river, and the second is a hotel resort that uses the river as recreation for its guests. When the iron plant dumps its waste into the river, it imposes an externality on the hotel resort. The resort is forced to pay additional costs to clean the river in order to maintain its recreational value. Likewise, the same phenomenon occurs in the acid rain controversy. Canada is faced with externalities generated from the United States. Both countries share an imbalance regarding the movement of pollutants. According to John Carroll (see Works Cited), Canada receives 50 percent of its acid deposition from the United States, whereas the United States receives only 15 percent of its acid depositions from Canada.<sup>4</sup>

As mentioned, externalities arise in circumstances where property rights are not defined. Air, like water, is a public good, and is enjoyed by the general public as well as users of industry. However, a public good attracts abuse because industries exploit the resource by neglecting to include the costs that are caused by acid rain. Figure 2 illustrates the economic principle of marginal analysis. When air is regarded as a free resource, industries will overpollute. The Marginal Costs (MC) curve represents the increasing costs that the private electric plant pays for production. Notice here that its costs are rather low, because the plant does not pay for the externality costs that it imposes on the community. As a consequence, the electric plant will exploit this situation by increasing its electric capacity and thus increasing

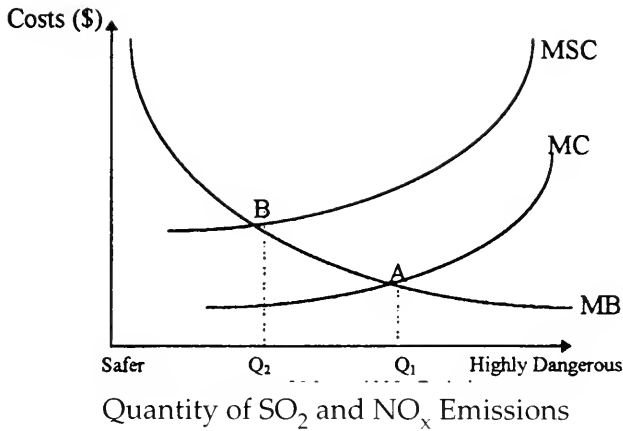


FIG. 2. THE CASE OF OVERPOLLUTION

Costs (\$) refers to the producers costs.

Marginal Benefit (MB) refers to the amount of benefit or production that the producer can receive. The MB curve tells us that when costs are high the amount of marginal benefit to the producer will be low, and therefore less emissions will be produced. Alternatively, as the slope of the curve decreases the costs to the producer decreases and so the marginal benefit increases. Consequently, when costs are low producers will increase their production and also increase the amount of  $\text{SO}_2$  and  $\text{NO}_x$  emissions

Marginal Costs (MC) refers to the costs incurred by the producer. These costs only include the producer's total production costs, and exclude the cost of pollution produced by the manufacturing. Marginal Costs fail to include the social costs of production on the environment. The MC curve tells us that initially costs to the producer will begin low. As production increases so too do the marginal costs for the producer. The intersection where the MC and the MB curves cross represents the point at which marginal costs equal marginal benefit. It is at this intersection (Point A) that the producer wants to be, so that his costs do not exceed his benefits.

Marginal Social Costs (MSC) refers to the actual or true cost that the producer should be paying for manufacturing. The Marginal Social Costs include the total production costs as well as the environmental costs to society. By using the Marginal Social Cost as the true

SO<sub>2</sub> and NO<sub>x</sub> emissions. Point A represents the point at which the plant is overpolluting the environment. Alternatively, Point B represents the optimal point at which ideally the electric plant should retain its level of production. At Point B, the electric power plant avoids overpolluting the atmosphere because its MC includes the social externalities that its pollution can cause to society, the Marginal Social Costs (MSC). The MSC represents a true marginal cost to the polluter, which means that the society can recover costs from externalities imposed by the electric power plant. The example shown of MSC represents a concept known as full-cost pricing.

The government can also be blamed for the extent to which acid rain is still a problem. Economists have long argued that government interference in the private sector generates an anti-

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cost of production, the producer is unable to yield as much Marginal Benefit as he once did when his costs were lower. The MSC curve tell us that in the beginning the costs to the producer (which include the social costs to the environment) will start at a higher cost than the MC and will then start to increase as the producer increases his production level. However, the MSC will incur higher costs to the producer compared to the MC. The intersection where the MSC and the MB cross represents the point at which the marginal social costs equal the marginal benefit. It is at this intersection (Point B) that the producer wants to be, so that his costs (MSC) do not exceed his benefits.

At the intersection between MC and MB, Point A, the producer is operating with low production costs because he is using his Marginal Costs as his total cost of production. This results in a higher yield of Marginal Benefit, which produces higher yields of SO<sub>2</sub> and NO<sub>x</sub> emissions. This is an example of overpollution.

At the intersection between MSC and MB, Point B, the producer is operating with higher production costs because the Marginal Social Costs is used to determine the total cost of production. By using the Marginal Social Costs the producer is paying the community for his part in pollution. Therefore, because costs are higher, the producer's Marginal Benefit is lower, and so this will produce lower or safer amounts of SO<sub>2</sub> and NO<sub>x</sub> emissions. Point B represents the ideal point where the community wants the producer to be, where there will be less pollution.

ficial economy. This argument is important in understanding why the private sector has shown little impetus to improve environmental conditions. Policy failures by the government encourage inefficiency in certain sectors of industry, for example, through its use of subsidies. In the case of agriculture, the United States has supported its farmers by subsidizing affordable fertilizers.<sup>5</sup> Many of these fertilizers, containing high amounts of  $\text{NO}_x$ , build-up residue during the winter, which is then released into lakes during warmer seasons, destroying ecosystems. However, the United States has run into problems in its attempt to reduce its use of subsidies. Subsidies have increased the prosperity of the agricultural sector, thereby increasing their political voice in Congress. As a result, farmers extensively lobby to maintain their subsidies from the government.

## SOLUTIONS

Any solution of the acid rain question in North America requires the cooperation of the United States and Canadian governments. Environment Canada and the United States's Environmental Protection Agency (EPA) are working jointly to define the extent to which  $\text{SO}_2$  and  $\text{NO}_x$  emissions are contributing to acid rain. Both countries are developing standards to provide a safe environment in which to live. Amendments to the Clean Air Act (CAA) of 1963 have incorporated this notion of safety. The EPA has a minimum acceptable level defined for the harmful chemicals such as  $\text{SO}_2$  and  $\text{NO}_x$  that will not cause harm for the public. Above this minimum, the EPA considers levels harmful and will implement command and control methods to force polluters to comply with its regulations. Below this minimum, the EPA will use incentive-based approaches to persuade polluters to reduce further the levels of emissions.

In some cases the EPA has been accused of inefficiency because of the use of these command and control standards. In a recent amendment to the CAA in 1990, the EPA restricted  $\text{SO}_2$

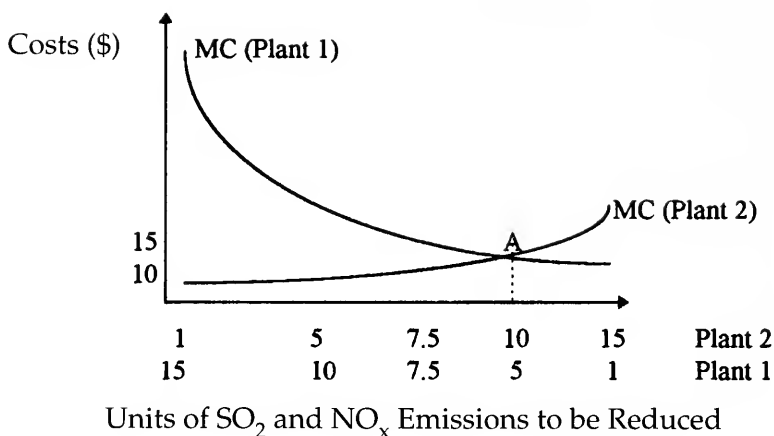


FIG. 3. COMMAND AND CONTROL

Costs (\$) refers to the costs to each plant in millions.

MC (Plant 1) shows the Marginal Costs curve for Plant 1. This curve measures the decreasing costs for Plant 1. This means that the initial startup cost for this electric plant was quite high. However, as production increases, the costs to Plant 1 decrease because Plant 1 does not have to invest in new equipment or technology. The units of  $\text{SO}_2$  and  $\text{NO}_x$  Emissions to be reduced for plant 1 are measured from right to left. This means that for Plant 1 to reduce emissions by 15 units, it incurs a cost of approximately \$60 million. The high cost for reduction of emissions is because Plant 1 has not invested in newer, more efficient technologies that will reduce the amount of pollution. A significant reduction in emissions means that Plant 1 will have to invest in new technologies.

MC (Plant 2) shows the Marginal Costs curve for Plant 2. Plant 2 invests in newer technologies the costs for Plant 2 also increase. This curve measures the increasing costs for Plant 2. This means that the initial startup costs were low and as Plant 2 invests in newer technologies the costs for Plant 2 increased. The Units of  $\text{SO}_2$  and  $\text{NO}_x$  emissions to be reduced for Plant 2 are measured from left to right. This means that for Plant 2 to reduce emissions by 15 units it will incur costs significantly lower than Plant 1 (at the same amount of units). This is because Plant 2 has newer technologies that produce less  $\text{SO}_2$  and  $\text{NO}_x$  emissions so less money will need to be spent to reduce emissions according to

emissions to 10 million tons per year below 1980 levels, bringing levels down to 8.95 million tons a year. The CAA further reduced  $\text{NO}_x$  levels to 2.5 million tons by the year 2000. This has been considered greatly inefficient because the costs of implementing these standards outweighs the benefits. Paul Portney has estimated that the cost of this legislation could run up to \$36 million, while the benefits are only \$14 million.<sup>6</sup> Other government control solutions include: cleaner  $\text{SO}_2$  and  $\text{NO}_x$  technologies and procedures, incorporating coal cleaning, flue gas desulfurization, and catalytic combustion.<sup>7</sup>

Although there are many merits in employing control methods such as stipulated by the EPA, in fact, as discussed by Portney, they can lead to economic inefficiency and often fail to encourage the polluters to reduce further emissions. In figure 3,

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the EPA specifications. Therefore, Plant 2 will have to expend far less money, time, and manpower to reduce emissions than Plant 1.

The intersection where MC (Plant 1) and MC (Plant 2) cross, Point A, is the point at which the marginal costs for both plants are equal (i.e. approximately \$12 million).

Command and Control measures refers to government directives that set the units and steps for which plants must reduce the amount of  $\text{SO}_2$  and  $\text{NO}_x$  emissions. Figure 3 is an example of a two-plant country. The EPA in this example has set a reduction of  $\text{SO}_2$  and  $\text{NO}_x$  emissions by 15 units each year. Consequently, the EPA has required each power plant to reduce emissions by an equal amount of 7.5 units. However, in Figure 3 it is clear that both power plants do not share identical Marginal Costs curves. It will cost Plant 1 \$15 million to reduce emissions by 7.5 units, whereas it will cost Plant 2 only \$10 million.

Under a system of Marketable Permits, where power plants could buy and sell their rights to pollute, Plant 1 could buy 2.5 units from Plant 2, which would require Plant 1 to reduce its emissions by only 5 units. This would save Plant 1 revenue (because costs would fall from the original \$15 million at 7.5 units to \$12 million at 5 units). Alternatively, Plant 2 will increase revenue from the sale of its units, and at the same time reduce its emissions by 10 units instead of the initial 7.5. Overall, the EPA requirement of 15 units is still maintained.

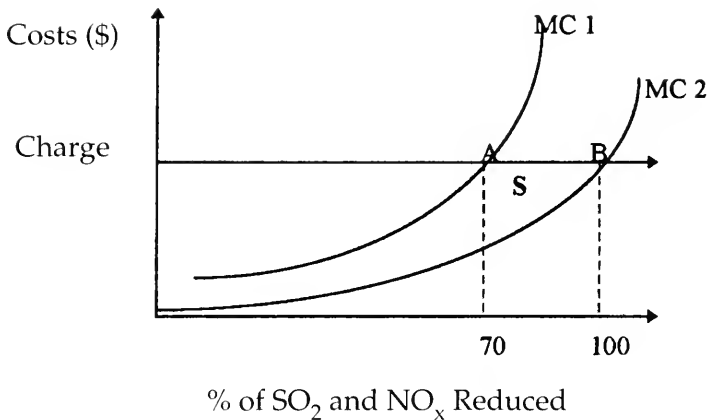


FIG. 4. EFFLUENT CHARGE

Cost (\$) refers to the cost to the producer.

Charge refers to the effluent charge. This means that polluters will be charged for each unit of  $\text{SO}_2$  and  $\text{NO}_x$  that they produce. Because the emission charge is so high, producers will prefer to invest in new technologies that produce less  $\text{SO}_2$  and  $\text{NO}_x$  emissions.

MC 1 refers to the first marginal cost curve for this power plant. This marginal cost curve has an increasing slope, which means that as the amount of SO<sub>2</sub> and NO<sub>x</sub> emissions to be reduced increases, so too does the cost to seek better technologies to reduce the emissions increase. For example, to reduce 5 % of emissions costs only \$1 million, where as to reduce 60% of emissions will cost significantly more. The intersection where MC 1 and Charge cross, tells us that the producer's alternative equals the effluent charge (Point A). Therefore, producers will seek to produce less SO<sub>2</sub> and NO<sub>x</sub> until the cost of reducing SO<sub>2</sub> and NO<sub>x</sub> is equal to the effluent charge. MC1 illustrates that 70 % of SO<sub>2</sub> and NO<sub>x</sub> has been reduced and the user is free to decide to stop seeking cheaper alternatives and pay the effluent charge or to seek for further emission reduction.

there is an example of a two-electric-power plant country. Both plants are required to reduce the amount of  $\text{SO}_2$  and  $\text{NO}_x$  emissions by 7.5 units to meet the EPA standard of a total of 15 units per year. Plant 1 is able to make the reduction of 7.5 units at a cost of \$15 million, whereas for Plant 2 the same reduction in units cost only \$10 million. Clearly, the more efficient plant is Plant 2; this plant is able to reduce emissions at a lower cost because it has cleaner technology. For this reason, Plant 2 could reduce more  $\text{SO}_2$  and  $\text{NO}_x$  emissions than the suggested requirement set by the EPA. However, government command and control policies provide little or no reward for firms to reduce more emissions.

In Europe there has been a mounting attack on the European Union's directive to reduce the level of  $\text{SO}_2$  to one percent. Sweden openly voiced its objection to this new directive because it limits the amount of fuel oil that Sweden can competitively produce. Sweden has argued for a "minimal" requirement, which would allow countries to reduce more emissions if their technology permitted.<sup>8</sup>

Incentive approaches can provide a viable alternative to the control approach. Recently, the EPA has implemented more incentive strategies to combat the level of  $\text{SO}_2$  and  $\text{NO}_x$  emissions. The theory behind the incentive approach is to encourage polluters to reduce as much  $\text{SO}_2$  and  $\text{NO}_x$  emissions as techni-

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MC 2 refers to the second marginal costs curve for the producer. MC 2 also has an increasing slope, which means that the more emissions to be reduced, the more the producer will be forced to pay for its implementation. MC 2 is important because it shows that after MC 1 was able to achieve 70% reduction in emissions, there is still an incentive for the producer to seek cheaper alternatives to the effluent charge. In doing so, the producer will save area S in effluent charges. The intersection where MC 2 and Charge cross tells us that the producer's alternative equals the effluent charge. In this case the producer has reduced 100% of emissions and so no longer has to incur the costs of the effluent charge.

cally possible. The United States and Canadian governments have implemented the following incentive-based approaches:

*Effluent Charge* — polluters must pay a charge for each unit of  $\text{SO}_2$  and  $\text{NO}_x$  that is discharged into the environment. This will encourage polluters who are efficient to reduce further emissions, while less efficient polluters will have the incentive to change their methods of production in order to maximize costs. Figure 4 shows that efficient users will continue to reduce emissions until the cost of reducing emissions equals the effluent charge. At this point, polluters will continue to seek cheaper alternatives to reduce further  $\text{SO}_2$  and  $\text{NO}_x$  emissions, and will save the area S in emission charges.

*Marketable Permits* — this is a system whereby the government equally distributes a fixed amount of pollution permits to all electric power plants. The number of permits are fixed as well as the amount of emission levels allowed in the environment. Polluters are then able to buy and sell permits among themselves according to their efficiency or inefficiency in combating pollution. This offers an incentive for an efficient producer to sell a portion of his permit to his less-efficient competitor. The efficient user generates revenue in this transaction, while his competitor increases his rights to pollute. Overall, the minimum level of emissions set by the EPA is maintained but it is no longer distributed equally amongst the polluters. The CAA of 1990 issued approximately 110 permits to U.S. power plants. The exchange of permits in this manner illustrates the Coase theorem, which states that when transaction costs are low, property rights will be reallocated in a way that will maximize benefits. In other words, while transaction costs are low, permits (property rights) will be exchanged among polluters to maximize the greatest efficiency. The distinction between marketable permits and the command and control strategies is that under this system property rights are established. Marketable permits grant electric power plants and other such polluters the legal authority to buy and sell their rights to pollute. Therefore, air is no longer simply

a common good that can be abused by everyone; it requires the purchase of rights (i.e., permits) in a market in order to pollute the air. The price at which these permits are brought and sold reflects the marginal social costs: a cost that incorporates externalities. Furthermore, the use of marketable permits also reduces the cost for government agencies. The use of control methods implies that the government must incur administrative costs to enforce its strategies. A system such as marketable permits encourages all polluters to reduce emissions in order to maximize profits.

*Offset Policies* — this policy has been initiated by the EPA to reduce the number of plants in regions that have severe problems of SO<sub>2</sub> and NO<sub>x</sub> emissions. The introduction of a new plant in such a region will require the purchase of credits for each unit of SO<sub>2</sub> and NO<sub>x</sub> emissions that the plant is estimated to produce. These credits are available not from government agencies, but from existing plants in the region.

Since the CAA of 1990, there have been impressive results from the advent of incentive-based approaches. The Act set the National Ambient Air Quality Standard (NAAQS) at 0.030 ppm.<sup>9</sup> The United States has maintained levels below this minimum, and through the use of incentive-based approaches has maintained an average of 0.015 ppm.<sup>10</sup> The acid rain example demonstrates that solutions can be made that will benefit both the environment as well as the owners of industry. Incentive-based solutions are more effective because efficient plants are encouraged to reduce emissions below the NAAQS requirements.

The effects from acid rain can have a severe impact on our environment. We have discovered that the effects from acid rain are not only an environmental concern, but is also an economic one. Industries such as fishing and timber have been forced to incur external costs imposed by other industries. Through marginal analysis it is apparent that the cause of acid rain lies with artificially low costs within industries. The lack of well-defined property rights has meant that polluters fail to include the social costs of their pollution in their production costs. This creates an artificially low production cost for the polluters, and

subsequently encourages further pollution. However, government subsidies to farmers have made it difficult to reduce the amount of  $\text{NO}_x$  in our rivers. Since the 1963 Clean Air Act, we have witnessed a transformation in the government's policies towards polluters. The command and control approach has failed to encourage polluters to seek better technologies to reduce emissions further. Alternatively, the incentive-based approach provides polluters with a window of opportunity to maximize their profits as well as improve the quality of the environment. The incentive-based approach transfers the responsibility of reducing  $\text{SO}_2$  and  $\text{NO}_x$  emissions from the government to the polluters. The acid rain debate is an excellent example of the success of implementing an economic strategy to solve an environmental concern.

## END NOTES

<sup>1</sup> Office of Technology Assessment, *Acid Rain and Transported Air Pollutants: Implications for Public Policy*. (U.S. GPO: Washington, D.C., 1984), 47.

<sup>2</sup> William K. Stevens, "The Forest That Stopped Growing: Trail Is Traced to Acid Rain." *The New York Times*, April 16, 1996, C4.

<sup>3</sup> Eban, S Goodstein, *Economics and the Environment* (New Jersey: Prentice Hall, 1995), 293.

<sup>4</sup> John E. Carroll, *Acid Rain: An Issue in Canadian-American Relations* (Washington D.C.: National Planning Association, 1982), 2.

<sup>5</sup> Thomas H. Tietenberg, *Environmental Economics and Policy*, (New York: HarperCollins, 1994), 159.

<sup>6</sup> Eban, 293.

<sup>7</sup> Carroll, 62-65.

<sup>8</sup> Oliver Tickell, "Burning Oils Fuel Acid Rain," *Geographical Magazine*, February 1996, 7.

<sup>9</sup> Office of Air and Radiation, *Air Quality Trends —1994*, OAR Publications.

<sup>10</sup> Ibid.

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## PATIENCE FOR THIS PIANIST'S DEATH

BY PAIGE R. PATTERSON

A pianist's music rumbles forth,  
partially audible beyond my door.  
I lean in to hear  
a final breath before his music's death.

It is like a planet's distant quake, his music  
that shakes me only at its highest peak.  
Patience for the single pitch to penetrate  
this oak that is too solid.

Patience as his passing notes climb  
to form a progression,  
as stairs that wind, to the approaching break  
of another, another note. Too muted.

## ONE BEGOT TWO

BY BEN SCHIEK

a dragonfly rose up  
    from a bo leaf  
        and flew past the lilies  
            and a footbridge  
                where a boy sat in the sun  
            executing calligraphy.

and the poet Po-Chu-i said,  
    "i can compose  
        a beautiful song for court,  
    and the emporer will commend me,  
    and the people  
        will look up to me  
    and I will become famous  
    though it means nothing."

and Li Chien his friend said,

"men write of falling on their face  
    and say it has meaning  
        because of the pain,

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but i call them cowards  
and say,  
‘paint a twig!’  
if it bends  
in the right spot  
it will manifest all  
the meaning of the universe.”

And Po-Chu-i and Li Chien walked  
around the pond  
in circles,  
and their footfalls’ falls  
turning over  
the dry pine needles  
and bo leaves  
as a dragonfly rose up.

## ELEGY FOR PABLO NERUDA

BY BEN SCHIEK

Neruda walked  
    down the coast  
    the infernal stones peopling his path,  
    and "Gracias," he said,  
        and the land snored;  
something was pulling  
    him away  
                    from the land.

He walked until  
    there was no more sand,  
        only stones,  
the beach becoming narrower,  
    the breakers crashing hard  
        upon  
        his right shoulder  
        his skull  
brushing against  
    the spacious incest of the sky  
  
    until finally:

    man sky ocean stone  
in the legendary marriage of the Earth,  
        and Neruda said

    "I'm becoming amazed with life."

## PAROXYSM

BY MICHELLE STRUNGE

It was a night like Noah's Ark.  
And there was really nothing else I could do  
(cold and thick with rain as I was)  
besides kiss him like that. It was like

my closest-to-atheism religion had been drowned  
violently on the run from the library home  
and, for a split second, as we met in the doorway,  
he wanting out and I wanting in,  
I believed in that cliché fate

and poured all that revelation  
of winter rain into his mouth.

## HUNGER: THE NATURE OF LONGING IN LINDA HOGAN'S POETRY

BY CHRISTOPHER WATKINS

**H**unger crosses oceans. / It loses its milk teeth... Hunger is the fisherman," and in Native American poetry, the fisherman is a man searching for something vital in the water.<sup>1</sup> Linda Hogan, a Native American poet, refers repeatedly to "hunger." In her poems, hunger is a longing, a looking back to something lost and a search for something one yearns to possess. This hunger is not for material wealth, exploded by greed. Hunger relates only to those abstractions, such as freedom and an easier way of life, which Hogan feels are the right of the Native American people — presented as a right usually because they are things that have been stolen from the people.

This essay serves to examine the nature and use of Hogan's conception of "hunger" in three poems — "The Fallen," "Hunger," and "Crow Law" — from her *Book of Medicines* anthology. Hogan's perception of hunger, in its many forms, presents to us the darker side of victimization.

"The Fallen" is a poem of longing and loss. The title itself suggests regret, bringing to mind the Christian story of Lucifer's fall from grace. In Milton's "Paradise Lost," Satan explains that he carries Hell within himself, because his true torment is his inability to be close to God. Satan remembers the joy of being near his Lord, but his desire to return to Him is twisted by the fact that he never can. This desire becomes the bitter lamentation that makes him a villain. It is ironic that Hogan chose to title her poem based on a Christian "white man's" story, considering that much

of the hardship felt by Native Americans was originally caused by the white man.

The poem opens with the image of an individual walking alone at night and coming across a dead wolf caught in a trap.<sup>2</sup> Immediately, the poem is rife with regret. "A comet with its silver tail/[falls] through darkness," once again evoking the Lucifer story.<sup>3</sup> The land is described as "eroded"; much of the farming soil on Native American reservations has lost its fertility because of overuse.<sup>4</sup> Worst of all is the wolf, whose "belly [is] swollen with unborn young," causing the reader to lament the lives that now can never exist, destroyed along with their mother in a snare used primarily by white trappers.<sup>5</sup>

"In [Native American] astronomy,/the Great Wolf/lived in sky."<sup>6</sup> At one time the wolf was revered, whereas now it is viewed as a savage animal, to be trapped, killed, or driven away from people. The speaker of the poem regrets this loss of a powerful spirit. "It was the mother of all women," but "the new people," the *white* people, feared and destroyed anything they failed to understand:<sup>7</sup>

In their stories  
Wolf was the devil, falling  
down an empty,  
shrinking universe,  
God's Lucifer...<sup>8</sup>

Once again, the poem is tied to Christian belief, and now it becomes clear why Hogan has identified her poem and her people with the "villainous" Satan. His sin was desire, made worse after his fall by its transformation into envy. This is also the nature of hunger, although the freedoms the Native Americans envy are their birthright; they are the victims of injustice.

Ironically, the wolf "with yellow eyes" knows that these "new people" will destroy themselves and the earth they stand on.<sup>9</sup> To these "new people" the wolf is the devil, but in actuality they themselves are the destroyers. The wolf's "yellow eyes," the

color of rot and sulfur, symbolize hellish torment and are the metaphorical "window to the soul," showing us that the wolf and Native Americans who identify with it have an unjustly tortured lot in life.

The speaker, moved by these notions, "[throws] the fallen stone back to sky," but "Sky would not take back/what it had done."<sup>10</sup> The comet has already fallen with its "silver tail" extinguished. Similarly, the wolf (with its own silver tail) is permanently dead; nothing can undo what has already happened. Regret builds at this point and becomes bitterness. "The eerie light of heaven/and storming hands of sun...dried up the nipples of a hungry world."<sup>11</sup> Dry nipples, from a literal point of view, are hard and give very little, and very bitter, milk. Symbolically, white Christians, with their greater numbers and technology, have destroyed the land to which the Native Americans are connected for both material and spiritual sustenance.

Hunger in "The Fallen" is a sense of bitter loss. The speaker regrets the loss of the wolf, yet knows he can do nothing to reverse what the white trapper (whose shadow bears four legs, making him the true "beast" in Native American eyes) has done. Native Americans are likened to infants suckling at nipples dried by other hands, made hungry because there is little sustenance left for them, but that continue to suck because they must go on somehow.

Hunger, personified, takes on a new aspect in the poem "Hunger." "Hunger crosses oceans," like people pushed out of their homeland and "It sits on the ship and cries," like a child who has lost its mother.<sup>12</sup> In time, however, Hunger "loses its milk teeth."<sup>13</sup> Loss, desire, and injustice mature over time into bitterness and regret, just as a child ages and loses its baby teeth.

As Hunger matures, it "[fashions] hooks to catch/the passing songs of whales"; without fulfillment, loss and desire can become greed.<sup>14</sup> The fisherman explains that "dolphins are like women," forcefully taken and abused despite their own gentle dispositions.<sup>15</sup>

We are viewing a picture of "Hunger" that, surprisingly, seems more focused on white people than on Native Americans. The whites came to the New World on torturous boat rides. They also now sail the oceans on whaling expeditions, grabbing for whatever sustenance they can, becoming greedy in their hunger. Clearly, Hogan is alluding to these events in white history and culture.

She attempts to explain the origins of white greed; Hogan explores the reasons why the whites stole land and dignity from the Native Americans. Hunger, her speaker states, drives them on:

It is the old man  
who comes in the night  
to cast a line  
and wait at the luminous shore.  
He knows the sea is pregnant...<sup>16</sup>

The "sea is pregnant," and the old man, motivated by his own memories of loss and feelings of regret, now seeks to grab all that he can, to obtain the hidden treasures, both real and symbolic, that he either lost or failed to find early in life. Hunger, throughout this poem, continues to mature. We see it at all stages, from infancy, "[sitting] on the ship and [crying]"; to adulthood, wherein it "[has its] way with [women]"; to old age, knowing longing intimately by this time.<sup>17</sup>

Whites are presented as living within a wall of shells. They surround themselves with the empty husks of what they have taken; the husks are reminders that the whites are now full and in turn "forget that hunger/sits on a ship and cries."<sup>18</sup> Hogan can empathize with the white peoples' hunger when they are isolated on the "ocean," struggling to survive. They are not alone in their hunger. Even the ocean "has hidden/signs of its own hunger."<sup>19</sup> It swallows ships and men because that is its nature.

However, this poem laments that the whites did not stop taking when their hunger was satiated — greed had grown from its seeds.

It is not strange, then, when the speaker describes this hunger as something that “brings us to love.”<sup>20</sup> At times, all people and all things in the world “[want] to live beyond [themselves].”<sup>21</sup> Our hunger is a bond that can unite us in common sympathy. However, hunger can go too far. It can, if matured, make one “like the destitute men/who took dolphins from the sea”; the men who “had their way/with [women]” because their desires turned bitter.<sup>22</sup> These are the people who worship a God they long to be closer to, whereas Native Americans view a Great Spirit who is *always* near. They want “to drink/and be held in/ the thin, clear milk of the gods.”<sup>23</sup>

“Crow Law” is a more direct poem about hunger, both physically and symbolically. Crow, a totemic entity in Native American belief, has a religion figured by a temple that walks, hidden, in “black grass.”<sup>24</sup> It betrays other animals as a part of its nature: “Betrayal is crow’s way of saying grace.”<sup>25</sup> Crow devours the scraps and “blood... on the ground” left behind by other creatures.<sup>26</sup> When it is finished, all that remains are bones — “the sacred temple of ribs” — made holy in crow’s unique point of view.<sup>27</sup>

To animals, like wolves and people, scraps and leavings are just that — things to be left behind. These remains, however, are holy to Crow, who forms a temple each time he finishes what another animal has only partially devoured. In this way, Crow is pictured as unique and, indeed, alien to us. It has “private gods,” just as we all have our own individual beliefs and purposes in life.<sup>28</sup> Crow’s god is a desperate, scavenging hunger, driving it to “[walk] forward in tall, black grass,” searching for whatever sustenance it can find.<sup>29</sup>

The relationship between crow and other animals is described as “the oldest war.”<sup>30</sup> Specifically, all human beings have

hunger within them. They carry aspects of the wolf, the moose, and the crow, each of these animals representing its own type of hunger. People — Native Americans in particular — transform from one to the other as these different desires take precedence. Hogan writes of Crow's "law" because in many ways, Native Americans have been forced to adopt its scavenging hunger. This hunger, however, remains somewhat alien to them. "Crow is calling," but the Native Americans "are still afraid" of its nature.<sup>31</sup>

The progression of these three poems is a process of maturation. From "The Fallen," through "Hunger," and into "Crow Law," hunger develops, mimicking the stages of human maturation, which are infancy, adulthood, and old age.

Both "The Fallen" and "Hunger" present images of pregnancy — hunger waiting to come to life. When these unborn lives are destroyed in the trapper's snare, the speaker (and we, the readers) feel our own hunger rise up. We lament the loss of such innocence, and long to see the destroyed lives returned, even though we know such a return is impossible. In "Hunger," the sea is pregnant, and the old fisherman stands on the shore, poised in expectancy. We can now see both sides of the same situation; we are introduced to the viewpoints of both the trapper and the entrapped. Both are hungry in their own way.

This hunger unites all life. As people cultivate their hunger through experience, they come to a greater understanding of it. Nature, pictured by the ship-eating ocean, reveals a hunger shared by all human beings. "Crow Law" also demonstrates this aspect of nature with its depiction of the crow's religion and activities. The poem "Hunger" explores this commonality by following the growth of need into the greed of the White Man ("Milk teeth" are lost as they focus inward on their own hunger). When hunger is allowed to grow through bitterness into greed, then nature is abused. Walled cities of empty shells are built, bones are left haphazardly in a mockery of crow's religion, and

the land becomes "ruined earth."

In youth, the drive of hunger can help one survive. For example, scavenging like the crow has helped Native Americans get through their trying times. But hunger turned into greed by age is a blight on people and the land. Hogan presents white greed in a unique religious parallel to Crow's hunger. Crow builds a temple each time it feeds. Its private gods are desperate but necessary to its survival. "The Fallen" shows aspects of both Christian and Native American religion; we discover that the two are almost dialectical opposites. Specifically, Christians see the Great Wolf as a devil, whereas Native Americans worship it; they empathize with Lucifer.

Hogan understands white hunger — "wanting to be inside,/ to drink/and be held in/the thin, clear milk of the gods" — but regrets that it has become greed.<sup>32</sup> Her poems demonstrate a belief that hunger unites people of different backgrounds. Hunger is common to us all. Unfortunately, hunger also rots. Unless we are careful, and keep our hunger's "milk teeth," that hunger will lose its innocence. Hunger, unchecked, can easily transform into destructive bitterness and greed.

#### END NOTES

<sup>1</sup> Linda Hogan, "Hunger," *The Book of Medicines* (Minneapolis: Coffee House Press, 1993), 17.

<sup>2</sup> Linda Hogan, "The Fallen," *The Book of Medicines* (Minneapolis: Coffee House Press, 1993), 42.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., 43.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

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- 12 "Hunger," 17.  
13 Ibid.  
14 Ibid.  
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17 Ibid., 17-18.  
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20 Ibid., 18.  
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24 Linda Hogan, "Crow Law," *The Book of Medicines* (Minneapolis: Coffee House Press, 1993) 31.  
25 Ibid.  
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28 Ibid.  
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31 Ibid.  
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## INCOMPLETE

BY KELLI K. YOUNGBLOOD

I know nothing of construction.

I was born into a house built anonymously  
and kept that way. We did not question

what man had lost which hand unjustly  
on the job. Instead my father hung himself  
a sign: *Buffalo Oaks*. Thus he

blazoned his two acres of wealth.

Painted white, with brass letters from the local  
hardware store's home improvement shelf,

it battered the post when cabal  
winds stampeded down our drive, when thunder  
shook the floorboards with an animal

cry, because dinner was under  
done or not done on time.

## MISFIRE

BY KELLI K. YOUNGBLOOD

My courage lost a coin toss  
with your eyes. They  
called heads; I called  
hearts. Neither caught. On

impact, it found a sound like  
a distant warning shot  
fired from the ground  
into the encroaching clouds.

## CONTRIBUTORS

TODD CHRISTOPHER BARTO is a senior physics major from Glen Burnie, Maryland. "The topic of my papers comes from my summer assistantship at the Space Telescope Science Institute in Baltimore, Maryland. I have always had an interest in space and space sciences, and it is a dream of mine to someday be able to explore space firsthand."

RAYMOND CUMMINGS is a junior from Owings Mills, Maryland, whose major is English and whose minor is philosophy. He doesn't enjoy writing autobiographical sketches because, sometimes, people actually read them. Cummings hopes to one day become a famous music critic, columnist, and, oh yeah, a writer.

BRANDON HOPKINS, the 1997 Sophie Kerr Prize winner, from Frederick, Maryland, graduated from Washington College with a major in Humanities. His work has appeared in several campus publications, including the 1994 *Washington College Review*. In 1995-96 he studied at the Johannes-Gutenberg-Universität in Mainz, Germany. He currently resides in New York City.

ROBYN J. MITCHELL graduated in May 1997 with a double major in French and Interdisciplinary Culture Studies and a minor in mathematics. She is originally from Severna Park, Maryland, where she began her studies in French. Robyn spent the fall semester of the 1996-97 school year in Paris researching French cinema for her manuscript, which she wrote in French and translated into English.

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CARL-JOHAN NORDBERG was born in Stockholm, Sweden, and is a Swedish citizen. However, he grew up in the German part of Switzerland. He came to Washington College at the age of twenty and is currently a senior majoring in International Studies and Economics. "I like all kinds of sports in which a ball is involved, I like to walk around in forests, and the change of seasons. I am concerned about the future of our planet and especially about some of my generation's attitudes towards nature. This was also a reason why I chose this topic because it gives us a preview of what could eventually happen to the world."

LUKE OWENS was born in Rising Sun, Maryland, and is an English/Humanities double major. "I enjoy playing the guitar and screaming 'Viva la cinema' as loud as I can. When I grow up I'd like to do some gardening."

ANGELA PANTON graduated in 1997 with a degree in International Studies and a history minor. "Although the U.S. is my current home, I am originally from London, England. I am a member of both Phi Alpha Theta International History Honor Society, and Pi Sigma Alpha National Political Honor Society. I would also like to thank my mother for her constant support which made this publication possible."

PAIGE R. PATTERSON is a senior from Stillwater, Maine, with a major in English and minors in music and Spanish. Her poetry has appeared around campus as well as in the Canadian publication, *The Voyant*, and in the following national publications: *The Unforgettable Fire*, *Poetry Motel*, and *Portland Review Literary Journal*. She won third-place prize in the 1997 Milford Fine Arts Council National Poetry Contest. She was accepted as a fellow into the June 1997 Bucknell Seminar for Younger Poets.

## CONTRIBUTORS

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MICHELLE STRUNGE, from Baltimore, Maryland, graduated in May 1997 with a degree in English. She has been published in literary magazines at WC, University of Delaware, and in Baltimore. She served as the editor of *Broadsides* last semester.

CHRISTOPHER WATKINS is a 1997 graduate who majored in English and minored in Art. He hails from Canandaigua, New York, a town famous for years of debate over how best to translate the word "Canandaigua." After graduation he hopes to travel to Japan, break into the fields of creative writing and illustration, and avoid student-loan collectors.

KELLI K. YOUNGBLOOD graduated in 1997 with a double major in English and drama, with concentrations in poetry and directing. For editorial advice, it is her linguistically brilliant and sensitive cat, Truman, who always has the last word.

## A WORD FROM THE PUBLISHER

Diversity. Paul Smail, whose photograph is on the cover of this issue of the *Washington College Review*, is a case in point. Paul is a poet. And a good one. But — as often with good liberal arts students who also practice the arts — Paul discovered during his education here at Washington College (probably because of his education here at Washington College) that he was not narrow-focused in his intellectual interests. He wrote poetry; translated French; acted; and during the final weeks of his student life here, landed a free lance job with SIPA Press — the great photo agency in Paris. In his future, Paul Smail will not only take pictures, he — like the rest of the students in this edition of the *Washington College Review* will bring into perspective all he learned at Washington College. These are the kinds of students the faculty at Washington College admires — and we admire our students and their education and accomplishments very much indeed.

This is my final issue as publisher of the *Washington College Review*. Over the previous twenty-five years I have seen it take on many forms. But none as generous as the form we publish today. I say so, not only because of the depth and breadth of the student writing, but because of the depth and breadth of the faculty and staff contributions. The *Washington College Review* is Washington College in a magazine. I am proud to have been a part of this achievement.

Robert Day  
Publisher

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